

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**THE RELATIONSHIP BETWEEN HIGH-PERFORMANCE WORK
PRACTICES AND JOB PERFORMANCE IN THE NIGERIAN
POLYTECHNICS: MODERATED BY WORKING CONDITION**

UMAR ABDULLAHI ABBOH



UUM
Universiti Utara Malaysia

DOCTOR OF PHILOSOPHY
UNIVERSITI UTARA MALAYSIA
JUNE,2020

**THE RELATIONSHIP BETWEEN HIGH-PERFORMANCE WORK
PRACTICES AND JOB PERFORMANCE IN THE NIGERIAN
POLYTECHNICS: MODERATED BY WORKING CONDITION**

By

UMAR ABDULLAHI ABBOH



UUM
Universiti Utara Malaysia

**Thesis Submitted to
School of Business Management,
Universiti Utara Malaysia,
in Fulfillment of the Requirement for the Degree of Doctor of Philosophy**



Pusat Pengajian Pengurusan Perniagaan
(School of Business Management)

Kolej Perniagaan
(College of Business)

Universiti Utara Malaysia

PERAKUAN KERJA TESIS / DISERTASI
(Certification of thesis / dissertation)

Kami, yang bertandatangan, memperakukan bahawa
(We, the undersigned, certify that)

UMAR ABDULLAH ABOH (900614)

calon untuk ijazah **DOCTOR OF PHILOSOPHY (HUMAN RESOURCE MANAGEMENT)**
(candidate for the degree of)

telah mengemukakan tesis / disertasi yang bertajuk
(has presented his/her thesis / dissertation of the following title):

**THE RELATIONSHIP BETWEEN HIGH-PERFORMANCE WORK PRACTICES AND
JOB PERFORMANCE IN THE NIGERIAN POLYTECHNICS: MODERATED BY WORKING CONDITION**

seperti yang tercatat di muka surat tajuk dan kulit tesis / disertasi
(as it appears on the title page and front cover of the thesis / dissertation)

Bahawa tesis/disertasi tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan, sebagaimana yang ditunjukkan oleh calon dalam ujian lisan yang diadakan pada:

22 Disember 2019.

(That the said thesis/dissertation is acceptable in form and content and displays a satisfactory knowledge of the field of study as demonstrated by the candidate through an oral examination held on:

22nd December 2019.

Pengerusi Viva
(Chairman for Viva)

Assoc. Prof. Dr. Siti Zubaidah bt. Othman

Tandatangan
(Signature)

Pemeriksa Luar
(External Examiner)

Assoc. Prof. Dr. Norzanah Mat Nor

Tandatangan
(Signature)

Pemeriksa Dalam
(Internal Examiner)

Assoc. Prof. Dr. Johanim binti Johari

Tandatangan
(Signature)

Tarikh: **22nd December 2019**
(Date)

Nama Nama Pelajar
(Name of Student)

Umar Abdullahi Abboh

Tajuk Tesis / Disertasi
(Title of the Thesis /
Dissertation)

THE RELATIONSHIP BETWEEN HIGH-PERFORMANCE
WORK PRACTICES AND JOB PERFORMANCE IN THE NIGERIAN
POLYTECHNICS: MODERATED BY WORKING CONDITION

Program Pengajian
(Programme of Study)

Doctor of Philosophy (Human Resource Management)


Nama Penyelia/Penyelia-
penyelia
(Name of
Supervisor/Supervisors)

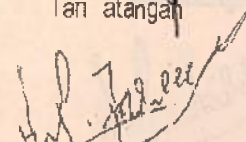
Assoc. Prof. Dr. Abdul Halim Abdul Majid



Dr. Hafiz Muhammad Fareed

UUM
Universiti Utara Malaysia


Tan atangan


Tandalangan

PERMISSION TO USE

In presenting this thesis in fulfilment of the requirements for a postgraduate degree from Universiti Utara Malaysia, I agree that the Universiti Library may make it freely available for inspection. I further agree that permission for the copying of this thesis in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor(s) or, in their absence, by the Dean of Othman Yeop Abdullah Graduate School of Business. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Requests for permission to copy or to make other use of materials in this thesis, in whole or in part, should be addressed to:



Dean of Othman Yeop Abdullah Graduate School of Business
Universiti Utara Malaysia
060 10 UUM Sintok
— Kedah Darul Aman

Universiti Utara Malaysia

ABSTRACT

Poor performance of lecturers in Nigerian Polytechnics warranted an independent research on lecturers' job performance, given that the poor performance can seriously affect educational development in the country. Substantial evidences from the extant literature have highlighted that high-performance work practices (HPWPs) were significant predictors and drivers of enhanced performance. Also, the effectiveness of HR practices is context-dependent. Therefore, the current study investigated the effect of HPWPs (recruitment and selection, training and development, compensation, performance appraisal and employee involvement) on lecturers' job performance in the context of Nigerian polytechnics. It also examined the moderating role of physical working condition in the HPWPs' relationship with lecturers' performance. Quantitative research approach with a cross-sectional technique, was used. Data were obtained from 722 academics in the North-west Nigerian polytechnics. The overall findings indicated that training and development, performance appraisal and employee involvement were significant predictors of enhanced lecturers' task performance while only training and development and employee involvement significantly predicted the enhanced lecturers' contextual performance. Moreover, physical working condition strengthened the recruitment and selection-task performance connection; performance appraisal-task performance nexus; and employee involvement-task performance relationship. Likewise, physical working condition strengthened the training and development-contextual performance connection; performance appraisal-contextual performance nexus; and employee involvement-contextual performance relationship. This implied that the link between HR practices and enhanced performance could be affected by the environment within which organizations operate. The present study focused mainly on the teaching staff of the polytechnics located in the north-west geopolitical zone of Nigeria. Thus, future research should examine other HPWPs such as job security, team work, organizational commitment, and work design in relation to job performance, and also to investigate physical working condition as potential mediator, different geopolitical zones and non-teaching staff from various polytechnics could be studied in future studies.

Keywords: High performance work practices, job performance, physical working condition, polytechnics, Nigeria.

ABSTRAK

Prestasi yang lemah dalam kalangan pensyarah Politeknik di Nigeria mewajarkan penyelidikan bebas terhadap prestasi kerja pensyarah memandangkan prestasi yang lemah boleh memberi kesan negatif kepada pembangunan pendidikan negara. Bukti daripada sorotan literatur telah memberi gambaran dan penekanan bahawa amalan kerja berprestasi tinggi (HPWP) merupakan peramal penting dalam memacu prestasi. Selain itu, keberkesanan amalan sumber manusia bergantung juga kepada konteks. Oleh itu, kajian ini menganalisa kesan HPWP (pengambilan dan pemilihan, latihan dan perkembangan, pampasan, penilaian prestasi dan penglibatan pekerja) terhadap prestasi kerja pensyarah dalam konteks politeknik di Nigeria. Kajian ini juga meneliti peranan penyederhanaan keadaan fizikal tempat kerja dalam hubungan HPWP dan prestasi pensyarah. Pendekatan kuantitatif dengan kaedah kajian rentas telah digunakan. Data diperolehi daripada 722 orang pensyarah politeknik di Barat-Laut Nigeria. Dapatan keseluruhan kajian menunjukkan bahawa latihan dan perkembangan, penilaian prestasi dan penglibatan pekerja merupakan peramal penting dalam peningkatan prestasi tugas pensyarah manakala hanya latihan dan pembangunan dan penglibatan pekerja memberi ramalan yang signifikan kepada peningkatan prestasi kontekstual pensyarah. Selain itu keadaan fizikal tempat kerja didapati mengukuhkan hubungan pengambilan dan pemilihan prestasi tugas; kaitan antara penilaian prestasi dan prestasi tugas; dan hubungan penglibatan pekerja dengan prestasi tugas. Pada masa yang sama, keadaan fizikal tempat kerja mengukuhkan hubungan antara latihan dan perkembangan dengan prestasi kontekstual. Hal ini menunjukkan hubungan antara amalan sumber manusia dan peningkatan prestasi boleh terkesan dengan keadaan persekitaran di mana sesuatu organisasi tersebut beroperasi. Kajian ini memberi penekanan khusus kepada tenaga pengajar politeknik yang terletak di zon geopolitik Barat-Laut Nigeria. Oleh itu, kajian akan datang adalah disarankan untuk meneliti elemen HPWP yang lain seperti jaminan pekerjaan, kerja berpasukan, komitmen organisasi, dan reka bentuk kerja yang berkaitan dengan prestasi kerja, dan menguji keadaan persekitaran pekerjaan sebagai pembolehubah pengantara, zon geopolitik yang berbeza dan melibatkan staf bukan tenaga pengajar dari pelbagai politeknik.

Kata kunci: Amalan kerja berprestasi tinggi, prestasi kerja, keadaan fizikal tempat kerja, politeknik, Nigeria.

ACKNOWLEDGEMENTS

I wish to first and foremost thank the Almighty Allah (SWT) for sparing my life, to undertake this PhD journey. May the peace and blessings of Allah be upon our beloved prophet Muhammad (PBUH).

I also wish to express my sincere acknowledgement to many important personalities whom I am indebted to for being influential to this PhD's programme. My special appreciation goes to my constructive and hardworking supervisors: Associate Prof. Dr. Abdul Halim Abdul Majid and Dr Muhammad Fareed for their professional guidance and patience for teaching me the art of research and scholarly writing. Associate Prof. Dr. Abdul Halim Abdul Majid, I would like to express that he is a great scholar, father and model of scholarship and excellence. I remain indebted to them.

I also would like to express gratitude to my lovely family, relatives and friends for the encouragements and prayers throughout this rigorous journey. Special thanks goes to my parents late Alhaji Malam Umar Musa, mother Haj. Khadiza and my step mum Malama Luba, may Allah reward them abundantly. Also, special thanks goes to my beloved wives, Hajara Haliru and Samira Sani Malami, and my children, Bilkis Abdullahi, Fatima Abdullahi, Zainab Abdullahi, Ahmad Abdullahi and Umar (Bappa) Abdullahi I really appreciate your patience and understanding.

Further, I like to extend my profound regards to my brothers and sisters: Prof. Sani Umar Musa, Dr Abubakar Umar Musa, Shehu Umar Musa, Ibrahim Umar Musa, Aliyu Umar Musa, Dr Muhammad Umar Musa, Fatima (Asshibi), Zainabu, Amina (Kura), Ummu Umar Musa, Amina Umar Musa and Hauwau (Yarallon Dije). Finally, I like to extend my sincere regards to my friends that academically contributed a lot in this research such

as Dr Nura Abubakar Allumi, Dr Ismail Abdussalam Iyanda, Dr Abubakar Tabi'u, Dr Abdullahi Goron Dutse, Dr Sabiu Salihu Malam and Nasiru Bunu Sabon Birni. May Allah (SWT) bless and have mercy on all of you. Finally, I would also like to thank Tertiary Education Trust Fund (Tetfund) and the management of Umaru Ali Shinkafi Polytechnic Sokoto, for all their financial support throughout this PhD journey, for without them, the PhD journey wouldn't have been possible.

Alhamdulillah.

Umar Abdullahi Abboh.



UUM
Universiti Utara Malaysia

TABLE OF CONTENTS

TITLE PAGE	i
CERTIFICATION OF THESIS WORK	iii
PERMISSION TO USE	iv
ABSTRACT	v
ABSTRAK	vi
ACKNOWLEDGEMENTS	vii
TABLE OF CONTENTS	ix
LIST OF TABLES	xiv
LIST OF FIGURES	xv
LIST OF ABBREVIATION	xvi
LIST OF APPENDICES	xvii

CHAPTER ONE INTRODUCTION 1

1.1 Background of the study	1
1.1.1 Higher Education Institutions (HEIs) in Nigeria	2
1.1.2 The Polytechnics in Nigeria	4
1.2 Problem Statement	10
1.3 Research Questions	18
1.4 Research Objectives	19
1.5 Scope of the Study	19
1.6 Significance of the Study	20
1.6.1 Theoretical Significance	21
1.6.2 Practical Significance	22
1.7 Definition of Key Terms	23
1.8 Organization of Thesis	24

CHAPTER TWO LITERATURE REVIEW	27
2.1 Introduction	27
2.2 Conceptual Background of Job Performance	26
2.3 Dimension of Job Performance	31
2.3.1 Task Performance	34
2.3.2 Contextual Performance	36
2.3.3 Differences & Interrelationship between Task and Contextual performance	40
2.3.4 Measures of Job Performance	40
2.4 Conceptual Meaning of HPWPs	42
2.4.1 Selection of HPWPs	51
2.4.1.1 Recruitment and Selection	58
2.4.1.2 Training and Development	61
2.4.1.3 Compensation	62
2.4.1.4 Performance Appraisal	63
2.4.1.5 Employee Involvement	66
2.5 Physical Working Condition	65
2.6 Underpinning Theory	70
2.7 Theoretical framework	73
2.8 Hypotheses Development	73
2.8.1.1 Relationship between HPWPs and Job performance	74
2.8.1.2 Relationship between Training and Development and Job Performance	78
2.8.1.3 Relationship between Compensation and Job Performance	80
2.8.1.4 Relationship between Performance Appraisal and Job Performance	81
2.8.1.5 Relationship between employee involvement and job performance	83
2.9 Moderating Role of Physical Working Condition	84
2.10 Chapter Summary	88

CHAPTER THREE RESEARCH METHODOLOGY 89

3.1 Introduction	89
3.2 Research Paradigm	89
3.3 Research Design	92
3.4 Population and Sample Size	93
3.4.1 History/Structure of Nigerian Polytechnics	93
3.4.2 Population	96

3.4.3 Sample Size	97
3.4.4 Sampling Techniques	102
3.4.4 Unit of Analysis	102
3.5 Measurement of the Variables	103
3.5.1 Job Performance	104
3.5.2 HPWPs	107
3.5.3 Physical Working Condition	111
3.5.4 Demographic Variable	112
3.6 Instrumentation	113
3.7 Content and Face Validity	114
3.8 Pilot Study	115
3.9 Data Collection Procedure	117
3.10 Data Analysis Techniques	119
3.11 Chapter Summary	120
CHAPTER FOUR DATA ANALYSIS AND RESULTS	123
4.1 Introduction	123
4.2 Response Rate	124
4.3 Data Screening and Preliminary Analysis	124
4.3.1 Missing Value Analysis	125
4.3.2 Assessment of Outliers	127
4.3.3 Normality Test	129
4.3.4 Multicollinearity Test	132
4.4 Non-Response Bias	133
4.5 Descriptive Statistics: Demographic Profile of Respondents	139
4.6 Descriptive Statistics Study of Latent Variables	141
4.8 Assessment of Partial Least Square (PLS) Structural Equation Modeling Approach	143
4.8 Assessment of the Measurement Model	144
4.8.1 Content Validity	147
4.8.2 Internal Consistency Reliability and Convergent Validity	149
4.8.3 Discriminant Validity of Measurement Models	150
4.9 Assessment of the Structural Model	151
4.9.1 Hypotheses Testing for Direct Relationships between IVs and DV	152
4.9.2 Assessment of Variance Explained in the Endogenous Latent Variables	155
4.9.3 Assessment of the Effect Size	156
4.9.4 Assessment of Predictive Relevance	157

4.10 Testing Moderating Effects	158
4.11 Summary of Hypotheses' Results	164
4.12 Summary of the Chapter	165

CHAPTER FIVE DISCUSSIONS, RECOMMENDATIONS AND

CONCLUSIONS	166
5.1 Introduction	166
5.2 Recapitulation of the Study	166
5.3 Discussions of the Findings	167
5.3.1 Testing the Direct Effects of HPWPs on Job Performance (Direct Paths)	169
5.3.1.1 The Effect of Recruitment and Selection on Task Performance	169
5.3.1.2 The Effect of Recruitment and Selection on Contextual Performance	171
5.3.1.3 The Effect of Training and Development on Task Performance	173
5.3.1.4 The Effect of Training and Development on Contextual Performance	173
5.3.1.5 The Effect of Compensation on Task Performance	175
5.3.1.6 The Effect of Compensation on Contextual Performance	176
5.3.1.7 The Effect of Performance Appraisal on Task Performance	178
5.3.1.8 The Effect of Performance Appraisal on Contextual Performance	180
5.3.1.9 The Effect of Employee Involvement on Task Performance	180
5.3.1.10 The Effect of Employee Involvement on Contextual Performance	181
5.3.2 Testing Moderating Effects of Physical Working Condition on HPWPs-Job Performance Relationship	183
5.3.2.1 Moderating Effect of Physical working condition on the relationship between Recruitment and Selection and Task Performance	184
5.3.2.2 Moderating Effect of Physical Working Condition on the relationship between Recruitment and Selection and Contextual Performance	185
5.3.2.3 Moderating Effect of Physical Working Condition on the relationship between Training and Development and Task Performance	187
5.3.2.4 Moderating Effect of Physical Working Condition on the relationship between Training and Development and Contextual Performance	188

5.3.2.5 Moderating Effect of Physical Working Condition on the relationship between Compensation and Task Performance	189...
5.3.2.6 Moderating Effect of Physical Working Condition on the relationship between Compensation and Contextual Performance	190...
5.3.2.7 Moderating Effect of Physical Working Condition on the relationship between Performance Appraisal and Task Performance	191...
5.3.2.8 Moderating Effect of Physical Working Condition on the relationship between Performance Appraisal and Contextual Performance	192...
5.3.2.9 Moderating Effect of Physical Working Condition on the relationship between Employee Involvement and Task Performance	193...
5.3.2.10 Moderating Effect of Physical Working Condition on the relationship between Employee Involvement and Contextual Performance	194...
5.4 Research Implications	196
5.4.1 Theoretical Implications.....	196
5.4.2 Practical Implications	198
5.5 Limitations and Future Research Directions	198
5.6 Conclusion	201
REFERENCES	203
APPENDICES	247

LIST OF TABLES

Table 1.1	Human Development Rankings	7
Table 2. 1	Different Interpretations of Job Performance	30
Table 2. 2	The concept of HPWPs	48
Table 2. 3	Summary of Some Selected Previous Studies on HPWS/ HPWPs	53
Table 3. 1	Population and Sample Size of the Study	101
Table 3. 2	Total of Scale Items Used in this study	104
Table 3. 3	Job Performance (27 items)	105
Table 3. 4	HPWPs (34 items)	107
Table 3. 5	Physical Working condition (7 items)	112
Table 3. 6	Pilot Study Result	117
Table 4. 1	Response Rate Analysis	123
Table 4. 2	Total and Percentage of Missing Values	126
Table 4. 3	Multivariate Outliers	128
Table 4. 4	Normality Test: Skewness and Kurtosis Statistics	130
Table 4. 5	Multicollinearity Test: Correlation Matrix of the Exogenous Latent Constructs	131
Table 4. 6	Multicollinearity Test based on Tolerance and VIF values	132
Table 4. 7	Results of Independent-Samples T-test for Non-Response Bias	134
Table 4. 8	Demographic Profile of Respondents (n=539)	138
Table 4. 9	Descriptive statistics of the latent variables	141
Table 4. 10	Internal Consistency and Convergent Validity	145
Table 4. 11	Discriminant Validity (HTMT criterion)	150
Table 4. 12	Results of hypothesis testing	153
Table 4. 13	Variance Explained in the Endogenous Latent Variables	154
Table 4. 14	Assessment of the Effect Size f^2 for Direct Relationships between IVs and DV	156
Table 4. 15	Predictive Quality Indicators of the Model	157
Table 4. 16	Hypotheses' Summary	163
Table 5. 1	Research Objectives and their corresponding hypotheses	166

LIST OF FIGURES

Figure 2. 1 Research Framework	73
Figure 3. 1 Organogram/structure of Nigerian Polytechnics	95
Figure 3. 2 Output of a Priori Power Analysis	104
Figure 4. 1 Histogram and Normal Probability Plots	130
Figure 4. 2 A Two-Step Process of PLS Path Model Assessment.. ..	143
Figure 4. 3 Measurement Model	144
Figure 4. 4 PLS-SEM Algorithm Direct Relationship (Measurement Model)	
IVs & DV	152
Figure 4. 5 WC-RS Interaction Effect on Task Performance	160
Figure 4. 6 WC-TD Interaction Effect on Contextual Performance	160
Figure 4. 7 WC-CMP Interaction Effect on Contextual Performance	161
Figure 4. 8 WC-PA Interaction Effect on Task Performance	161
Figure 4. 9 WC-PA Interaction Effect on Contextual Performance	162
Figure 4. 10 WC- EI Interaction Effect on Task Performance	162
Figure 4. 11 WC-EI Interaction Effect on Contextual Performance	163



UUM
Universiti Utara Malaysia

LIST OF ABBREVIATION

CP-Contextual Performance
CMP- Compensation
EI- Employee Involvement
HDI- Human Development Index
HEI's- Higher Educational Institutions
HPWPs- High Performance Work Practices
HR- Human Resource
JP- Job Performance
NBTE- National Board for Technical Education
NHDR- National Human Development Report
PA- Performance Appraisal
PLS-SEM-Partial Least Square Structural Equation Model
RS- Recruitment and Selection
SHRM- Strategic Human Resource Management
SPSS- Statistical Package for Social Science
TD- Training and Development
TP- Task Performance
TRCN- Teachers Registration Council of Nigeria
UNDP- United Nations Development Plan
WC- Physical Working Condition

LIST OF APPENDICES

Appendix	Details	Page
Appendix 1	Research Questionnaire	250
Appendix 2	Publication from the PhD research	255
Appendix 3	Literature Matrix Summary	256
Appendix 4	Matrix of Some Dimensions of Job Performance	273
Appendix 5	Matrix of some previous studies on Working Condition and Job Performance	276
Appendix 6	Matrix of some previous studies on HRM and Job Performance	280
Appendix 7	Letter of Data Collection (from OYAG B) S	287
Appendix 8	Recommendation Letters from Data Collection	288



UUM
Universiti Utara Malaysia

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Globally, education is recognized to be the prominent mechanism for promoting economic progress (Brunner, 2013; David, 2014) and reducing poverty (Teal, 2011). For Nigeria, education becomes inevitable for the country to survive and regain her lost glory as an Africa's largest (in terms of population) and perhaps third Africa's richest country (Scheffran, Marmer, & Sow, 2012). Also, the fact that education has been recognized as an instrument par excellence for national development, makes it attract massive investments from governments and other stakeholders in developing countries including Nigeria (Yusuf & Ogbudinkpa, 2017).

In Nigeria, one of the most crucial aspects of education is the higher education. This is because Higher education is expected to make significant contribution to the economic development, growth and competitive advantage of Nigeria by imparting knowledge and skills to current and potential manpower (Coughlan, 2011; Rabah, 2016). Higher education is expected to serve as a training ground for potential leaders and develop high-level technical capabilities that strengthen the economic development and growth of every nation (Glewwe, Maïga, & Zheng, 2014; Pillay, 2011). Higher education system comprises institutions of higher learning such as colleges of education, monotechnics, polytechnics, and universities that are charged with the responsibilities of training higher and middle-level manpower (Adeniyi & Taiwo, 2011). A brief on HEI's was given in the paragraphs that followed.

1.1.1 Higher Educational Institutions (HEIs) in Nigeria

The significance of HEI's globally and Nigeria in particular, cannot be overemphasised. This is perhaps because they are loaded with the task of making the youth to have a better life in the course of making arrangement and execution of the institution's curriculum. The administration and management of HEI's involve the collaborative efforts of the teachers, management, and nonteaching staff to achieve the objectives. The research and educating aspect are very prominent as such play vital roles in the development of a nation, mainly in terms of workforce development.

According to David, Vught, and Frans (2010), higher education in HEIs signifies stability in innovation and human capital development which in the long run may result in economic sustainability and economic advancement. In the reports of Organization for Economic Co-operation and Development (OECD, 2015), higher education, which is being delivered by HEIs, has for the past decades, becomes progressively significant on national agenda and has also undergone many adjustments and reforms world over (Santiago, Tremblay, & Arna, 2008).

African higher education in HEIs is acknowledged in their unique form, having the lowest knowledge generation, accessing and disseminating capacity in the world with an ineffective innovation capacity (Onuka & Ajayi, 2012). More so it has been revealed in the extant literature that African higher education flourished in the 60s and 70s and started changing for the worse in the late 1970s (Onuka & Ajayi, 2012). Moreover, HEIs have assumed the important status in the globe in general and Nigeria in particular (Nura, 2014). Possibly, the achieved feat is due to the wearisome task of making the youth to have a focussed life in the course of making, organizing, and execution of the institutions'

curriculum (Nura, 2014). The education aspect and possibly some pronounced research play crucial roles in the growth of the nation, mostly in human capital development. Prior to this, Adeogun, Subai, and Osifila (2009) appealed for provision, administration, transformation, and investment in higher education, given the fact that education particularly the tertiary education is pivotal for social and economic development. Correspondingly, it is apparent that the entire intellectual and professional spheres of a nation are contingent upon all-encompassing higher education, most especially, higher education that produces quality graduates to the society (Nura, 2014).

Nevertheless, the lack of performance in Nigerian education sector, most especially HEIs, is very critical. This is because of the reliance of economy on the provision of quality educational services as well as other services provided to the society which serve as the most essential services needed from the system. Although, public service in Nigeria is argued to be underperforming in the provision of these important services and other services that can satisfy the citizens (Okonjo-Iweala & Osafo-kwaako, 2007). This precipitates many complaints from the citizens with regards to the quality, deteriorating nature of performance, and standard of the most important sector of the economy which is the education sector (Okonjo-Iweala & Osofo-Kwaako, 2007).

Equally, grievances of underperformance of the educational sector in Nigeria had been raised by international organizations, politicians, students, governmental and non-governmental organizations, authorities, and the general public to improve Nigerian education system (Aminu, 2015; Eta, 2015; Ejike, 2015; Oluwarotimi, 2015; UNDP, 2015). In the section that follows, an overview on Nigerian Polytechnics was discussed.

1.1.2 The Polytechnics in Nigeria

Polytechnic, as a higher education provider, is anticipated to contribute to the development of a nation through manpower training as well as provide appropriate contribution to the sustainable existence of the nation, society, and people, and enhance the intellectual potential of people (Nura, 2014). Polytechnics constitute about 22.42 percent, Universities 30.36%, monotechnics 5.16%, others 42.06%, of HEIs in Nigeria (Agbu & Mishra, 2017). Nearly all the public and private higher education institutions are passing through an evolutionary process to become actors of national development, (Mitchell & Nielsen, 2012; Naidoo, 2006).

The national development to which Polytechnic should contribute could be jeopardized if the performance of lecturers is not enhanced. This is because lecturers play a significant role in providing quality higher education to students; as such, their performance is essential in HEIs in Nigeria. More so, HEIs are established to offer opportunities for both undergraduate and postgraduate students, through the offering of vocational, technical and administrative programs (Clark, 2013).

The government believes that enhancing lecturers' performance will equally boost the performance of students, whereas, the poor performance of lecturers may seriously affect educational development in the country (Oseni 2011). The Nigerian government is spending massively on education to increase literacy level among its citizens, achieve economic growth and development and improve the competitive advantage of Nigeria at the global level. Equally, the Nigerian government has established polytechnics across the country with the hope of training students that would lead to the industrial development and transformation of the country's economy (Jahun, 2017). According to

National Board for Technical Education [NBTE] (2017), the purpose of establishing polytechnics in Nigeria is mainly to train and produce middle-level technical manpower in courses leading to the awards of Higher National Diploma, National Diploma, Certificates, and Advanced Professional Diploma which are significant to the needs, aspirations and the development of the nation's diverse economy and industries.

Moreover, lecturers are employed in the polytechnics to undertake teaching, research and administrative duties. Therefore, lecturers are anticipated to play a very important role for the development of Nigerian educational system (Yusuf & Ogbudinkpa, 2017), and the realization of Education For All (EFA) goal and accomplishment of socio-economic growth of Nigeria (NEEDS, 2014). However, the performance of lecturers in the Nigerian polytechnics is low (Onoyase, 2017), despite several educational policies initiated by the government, and professional bodies regulating polytechnics such as National Board for Technical Education (NBTE) to maintain standard in teaching and certify individual teachers in the country (Fareo, 2013).

Onoyase (2017) has described poor job performance of Nigerian lecturers as a common occurrence that is characterized by poor lecture delivery, inadequate preparation of lecture notes as well as the insufficient process of evaluating students. Also, Jaja (2013) stated that many of tertiary institutions' lecturers in Nigeria, including polytechnics, lack adequate teaching ability, and as such course outlines are not adequately covered. Moreover, job performance of lecturers contributes to quality education and transformation and shaping of the country's potentials towards sustainable national

development (Oke, Ogundele, & Mainoma, 2017), and success of educational institutions and achievements of students (Abbasi & Mir, 2012).

The polytechnics, in particular, are specially established to offer national diploma and higher national diploma courses. According to Nura (2014), polytechnics can contribute to national development through the teaching of appropriate values and skills to students, manpower training, and development of students' intellectual abilities, for them to be self-reliant and contribute towards societal development. Although, Nigerian polytechnics were said to support socio-economic development as well as national unity and international relations as pointed out by Ighalo, (2014), polytechnics lecturers' performance has become a matter of concern.

Despite several government efforts in improving the performance of lecturers in the Nigerian HEIs, lecturers performance is still very pathetically low (Nura, 2014). However, poor job performance is described as costly to both employees and organizations. To the organizations, poor job performance diminishes productivity by about 30% to 40% (Sutton et al., 2011). And, to the employees, poor job performance results to personal failure and inability to achieve goals which might be regarded as dissatisfying to overall organizational success (Sonnentag & Frese, 2002).

In Nigeria, Arguably, as Oseni, (2011) lamented, poor quality of education is as a result of poor lecturers' performance which led to the perpetual mass failure of students, and the government's concern in improving on the performance of lecturers. Whereas, the citizens of some African countries like Rwanda, South Africa, and Namibia, Kenya, Zimbabwe and Botswana have acknowledged their satisfaction with the quality of educational

services in their countries as a result of the higher performance of lecturers which was rated at 84%, 73%, and 71%, 68%, 64% and 56% respectively. However, the situation of satisfaction with the quality of education in Nigeria as reported by the Human Development Report of UNDP (2015) was only 51% which is very alarming and unfavorable as could be seen in the table 1.1 below:

Table 1.1

Human Development Rankings, Satisfaction with Quality Education and Ten African Countries with Best Education System

S/N	Countries	Satisfaction with Quality Education	2015	2016	2017	2018	2019
			HDI Value	HDI Rank	HDI Value	HDI Rank	Ten African Countries with best Education System
1.	Algeria		0.745	123	0.734	85	5
2.	Tunisia					95	2
3.	South Africa	73%	0.666	119	0.699	113	4
4.	Seychelles						1
5.	Egypt		0.691	111	0.696	115	8
6.	Morocco					123	
7.	Namibia	71%	0.640	125	0.647	129	10
8.	Botswana	56%	0.699	108		101	
9.	Kenya	68%	0.555	146	0.590	142	6
10.	Congo		0.592	135	0.606	137	7
11.	Cape Verde					0.608	138
12.	Mauritius						8
13.	Ghana		0.579	139	0.592	140	3
14.	Gabon		0.697	109	0.702	110	
15.	Rwanda	84%				0.536	157
16.	Zimbabwe	64%			0.535	156	
17.	Zambia		0.579	139	0.588	144	
18.	Cameroun				0.556	151	
19.	Nigeria	51%	0.527	152	0.532	157	150
						0.534	158

Source: Human Development Report of UNDP (2016; 2017; 2018), Chime (2019).

Also, Asiyai (2013) and Bamiro (2012) have described the performance of Nigerian lecturers in polytechnics as ineffective and inefficient, and when compared with universities the low performance is more worrisome in the Nigerian polytechnics. In line with that, Akindele (2012) emphasized that Nigeria is a country where lecturing is for all kinds of people irrespective of their ability to perform. As a result of that, it leads to both low performances of the sector as well as the employees. According to Akindele (2012) and Isaac et al. (2011), the poor performance of lecturers in the Nigerian HEIs is brought about by the number of incompetent lecturers that should not be found in academics, yet the educational institution's systems are stocked with them. According to the Human Development Index (HDI) and the Educational Index of United Nations Development Plan (UNDP) (2016), the ranking of Nigeria in the world educational ranking was 152 out of 188 and 148 out of 188 countries of the world respectively. As shown in Table 1.1 above:

Again, the Table 1.1 above showed that the Human Development Indices and Indicators of UNDP (2018) stated that the educational achievement of Nigeria was ranked at 157 out of 189. This showed that Nigeria's quality educational system is still very low compared to its contemporaries.

Similarly, the above Table 1.1 displayed a report by The World Economic Forum that assessed African countries and ranked the countries with best educational system based on skills and development (Chime, 2019), the report showed that, Nigeria has lower educational system quality compared to other African counterparts like Mauritius, Namibia, Egypt, Botswana, Cape Verde, Tunisia, South Africa, Seychelles, Kenya, and Algeria with 3rd, 10th, 9th, 6th, 8th, 2nd, and 7th positions respectively. While the situation in

Nigerian education remains unfavorable with ranking at 25th of educational system quality which directly indicates the poor performance of lecturers in Nigerian educational institutions. However, the statistics depicted a clear indication of the poor performance of lecturers in the Nigerian HEIs such especially the polytechnics. Similarly, researchers (Rasheed, Aslam, & Sarwar, 2010; Samuel, Kwapong, Opoku, & Donyina, 2015; Shah, 2012) maintained that in every polytechnic the quality of education is dependent on the performance of its lecturers. Hence, performance of lecturers determines the performance of tertiary institutions as well as public satisfaction in educational services. Also, the educational system failure is a manifestation of the performance of lecturers' failure (Adamolekun, 2016).

Accordingly, governments, and other stakeholders in the education sector, have complained over the underperformance of lecturers in the country (Jonin, 2009). They maintained that it is essential to improve the lecturers' performance as doing that will help to promote the quality of education in the country. Equally, Halim (2009) revealed that lecturers are the most important factor that governs the overall performance of nation's higher institutions. Thus, there is a need to assess the performance of lecturers as it will improve the quality of education. In a similar fashion, Harrison (2012) stressed that it is imperative to address the issue of lecturer's poor performance effectively to prevent it from affecting the standards across the board.

Although many educational policies have been formulated to improve the poor performance of lecturers in the Nigerian educational sector (Fareo, 2013), the policies have not been effective. Moreover, recent research has proven that strategic HRM is a strong predictor of performance enhancement (Seidu, 2011). Literature has revealed some HR

practices henceforth high performance work practices [HPWPs] that constantly result to higher performance of both organization and individual (Werner, 2011). In addition, a good set of HPWPs gives rise to competitive advantage and then leads to enhancement in productivity, industrial competencies and achievements of organizations via the instrumentality of workers, who are competent, knowledgeable and equipped with the needed skills required for the implementation of organizational planning and strategy (Ismail, 2014; Ismail, Abdul-Halim & Joarder, 2015a).

As established on the above discussion, this research stands to examine the moderating influence of physical working condition on the relationship between HPWPs (training and development, recruitment and selection, performance appraisal, compensation, employee involvement) on job performance in Nigerian Polytechnics. The next section discussed the problem statement.

1.2 Problem Statement

Poor performance of lecturers in the Nigerian Polytechnics warrants an independent research, given that lecturers' poor performance in the Polytechnics could jeopardize the national development to which Nigerian polytechnics should contribute. This is because lecturers' job performance contributes to quality education and transformation and shaping of the country's potentials toward their sustainable national development (Oke, Ogundele, & Mainoma, 2017). Like other organizations, Nigerian HEI's are catching up with HEIs in advanced countries which require them to further enhance their employees' performance (Ismail, Abdul Majid, & Joarder, 2017). As mentioned earlier, poor job performance of Nigerian lecturers is characterized by poor lecture delivery, inadequate

preparation of lecture notes as well as the insufficient process of evaluating students performance (Onoyase, 2017), and lack of adequate teaching ability (Jaja, 2013).

Several educational policies have been formulated to improve the poor performance of lecturers in the Nigerian educational sector (Fareo, 2013), the policies have not been effective. Accordingly, governments, and other stakeholders in the education sector, have complained over the underperformance of lecturers especially at the HEI's (Jon in, 2009).

They maintained that it is essential to improve the lecturers' performance as doing that will help promote the quality of education in the country. In line with this, the current president of Nigeria Muhammadu Buhari on his first tenure inaugural speech on 29th May, 2015 made mention that education is one of his government priority, the president emphasized that Nigeria is facing challenges such as inefficiency, low productivity and pervasive corruption in the public sector, low performance in education those according to him are the immediate concerns (Kubeka, 2015; Eta, 2015; Ning, 2016). Similarly, the Nigerian vice president Yemi Osibanjo emphasized that the public sector in Nigeria is surrounded by issues of corruption, low performance and ethical issues more especially in the educational sector (Agba, 2015).

Also, from the perspectives of individual states in the North-West in particular, the Sokoto State government how to declare state of emergency in the state due to mal-administration in the sector which results to lack of quality of education, non-performance of the sector, as the sector is surrounded with incompetent staffs which among other things are contributory factors to poor performance in educational sector (Aminu, 2015). Similarly, the governor of Kaduna State El-Rufai (2015) has emphasized that Nigerian higher institutions are facing a lot of challenges such as inadequate teaching facilities,

incompetent staff as well as the unwillingness of employees to discharge their responsibilities and achieve both individual and organizational goals (Akindele, 2012; Isaac et al., 2011). All these issues are some of the factors contributing to the low performance of the educational sector as well as lecturers in the higher educational institutions.

Moreover, several studies were carried out on factors that can enhance job performance of employees (lecturers) in Nigeria. For instance, some studies investigated the effect of HR practices (e.g., training and development) (Babagana, 2014a, 2014b; Faiola, Osibanjo, & Ojo, 2014; Karimi, 2014; Ugbomhe, Nosakhare, sagie, & Egwu, 2015); stress management (Egu, Ememe, Obike, & Clement-Ukandu, 2014; Egu, 2014); motivation (Onoyase, 2017); teaching qualification, characteristics and competence (Lucky & Yusoff, 2013); leadership style (Ajibade, Ajayi, & Shobowale, 2017); performance appraisal (Akinbowale, Jinabhai, & Lourens, 2013); remuneration (Calvin, 2017); organizational culture (Awadh, & Saad, 2013; Morgan, Chisoro & Karodia, 2015; Bodla, Ali & Ali, 2013; Zakari, Poku & Owusu Ansah, 2013); organizational justice (Efanga, Aniedi, & Idente, 2015); and organizational commitment (Folorunso & Abodunde, 2014) on job performance.

From the above mentioned studies, it is believed that the literature has indicated that the impact of HPWPs and physical working conditions on the job performance of lecturers have not been given due attention in the performance research field, most especially in the Nigerian context, even though HPWPs constitute a foundation for competitive advantage (Bamberger, Meshoulam & Biron, 2000; Delery & Roumpi, 2017), and enhanced performance (Seidu, 2011).

Performance of lecturers in Nigerian polytechnics can be improved through HPWPs because it has been proven by the existing literature that HPWPs would always lead to greater job performance (Pak & Kim, 2016; Werner, 2011). Very few studies examined the impact of HPWPs on employee job performance (Pak & Kim, 2016). Also, most of the studies focused on organizational performance in industrial settings (Ismail, Abdul-Majid, & Joarder, 2017; Mazzei, Flynn, & Haynie, 2016; Shin & Konrad, 2017; Macduffie, 1995; Delaney & Huselid, 1996; Delery, Gupta & Shaw, 1997). Furthermore, high level of productivity, performance and competitive advantage exist through the mechanism of employees that are furnished with the essential knowledge, skills and abilities (KSAs) required for the implementation of organizational planning and strategy (Fu, 2013; Ismail, Abdul-Halim & Joarder, 2015; Mansour, Gara, & Gaha, 2014). It has been indicated by the extant research that HPWPs that is employee oriented would enhance productivity and performance.

Additionally, previous researchers suggested for future research of these selected variables; recruitment & selection (Jibrin-Bida & Abdul-Majid, 2017; Tabiu, Pangil & Othman, 2016); Training & development (Jibrin-Bida & Abdul-Majid, 2017; Cobblah & Walt, 2016; Nadeem, Ahmad, Ahmad & Abdullahi, 2015; Javed, Balouch & Hassan, 2014; Bonsu & Kusi, 2014; Faiola, Osibanjo & Ojo, 2014); Compensation (Nadeem, Ahmad, Ahmad & Abdullahi, 2015; Rapp, Agnihotri, Bakker & Anzulis, 2015); Performance Appraisal (Cobblah & Walt, 2016; Babagana, 2014); Employee Involvement (Tabiu, Pangil & Othman 2016; Adebunmi, Etejere & Saheed 2016; Rahman, Hussain & Haque 2015; Nadeem, Ahmad, Ahmad & Abdullahi, 2015). Again, Anakwe (2002)

suggested that future research should focus on investigating employee perceptions of the HRM practices such as recruitment and selection, training and development and their impacts on individual outcomes. Moreover, HPWPs constitute a source of organizations' sustainable competitive advantages, and therefore enhance organizational performance (Choi & Lee, 2013; Choi, 2014; Chuang & Liao, 2010; Demirbag, et al., 2014; Fan, et al., 2014; Fu, 2013; Shin & Konrad, 2014; Seidu, 2011). HPWPs improves and motivates employees to show quality job performance and reduced turnover (Aryee, Walumbwa, Seidu, & Otake, 2012; Karatepe, 2013).

HPWP is a new phenomenon in Nigeria. Majority of the studies on HPWPs/HPWS were carried out in developed nations. For instance, (Huang, Ahlstrom, Lee, Chen, & Hsieh, 2016; Mazzei et al., 2016; Ogbonnaya & Valizade, 2016; Pak & Kim, 2016; Posthuma, Campion, Masimova, & Campion, 2013) However, few studies were carried out in the Nigerian context (Ismail et al., 2018; Ismail, Abdul-Majid, and Joarder, 2017; Karatepe & Olugbade, 2016). Although these studies signified the positive effects of HPWS/HPWPs on performance and other outcomes, there is still dearth of research in the context in which the studies were carried out (i.e., Nigerian non-public sector), and it is suggested that the research models of these studies should be replicated in another Nigerian contexts such as Nigerian public sectors. This also finds support in the argument of Ismail, Abdulrahman and Abdul Majid (2018) probes the strenght of the mediating influence of employee creativity on the link between HPWS and SME performance in Nigeria. While, Ismail et al. (2017) study the impact of the mediating role of employee creativity and the moderating effect of management philosophy in the HPWS and SME performance relationship in Nigeria. Lastly, Karatepe and Olusegun (2016) in his studies

entitled, the mediation role of work engagement in the link between HPWS and job outcomes of employees in the international four- and Five-star chain hotels in Nigeria.

The above mentioned studies were all carried out in the private sector in the country, thereby neglecting the Nigerian public sector including the educational sector. Hence, to the best knowledge of the researcher that no research was carried out on HPWPs and performance in the Nigerian public sector especially the educational sector. Perhaps that's why Karatepe and Olusegun (2016) recommended that future studies should focus more on other service organizations such as the education sector in Nigeria. Thus, this research examined the effects of HPWPs on job performance in the Nigeria polytechnics.

Furthermore, poor physical working condition of Nigerian workers has continued to be dire and exacerbating. Onoyase (2017) and Ukpai (2015) revealed that the existence of a poor physical working condition in the polytechnics is connected with poor lecture halls, inadequate of lecturer's offices, library, insufficient books, and journals. Equally, Pihie and Elias (2004) and Victor and Babatunde (2014) revealed that lack of good physical working condition as well as the motivational mechanism has led to low morale and performance of the lecturers. In addition, an unconducive physical working condition can result in lowering employee performance, low productivity and job dissatisfaction (McGuire & McLaren 2008). Likewise, Wamalawa, Kumati, and Wandera (2015) asserted that the atmosphere where employees work plays a full-size position for the performance and productivity of an employee given that the characteristic of the working surroundings can also outline the stage of worker motivation. So also, Inuwa (2017) emphasized that one of the factors causing to low job performance in the Nigerian polytechnics is lack of

favorable physical working environment. Therefore it is essential to consider the interaction of the physical working condition in predicting job performance.

Given poor physical working condition in the educational sector in Nigeria, the federal government of Nigeria has increased the educational budget allocation in 2018 from N550 billion allocated in 2017 to N605 billion in 2018. This was to boost the educational sector including physical working condition especially in the higher institutions where academic staffs and non-academic staff are threatening to go on strike due to poor physical working condition (Utomi, 2018). Moreover, there was substantial evidence demonstrating that employees' perceptions on their physical working conditions can be affected by their behaviors and attitudes, thereby decreasing their performances in the workplace (Yang, Johnson, Bauer, Groer, & Salomon, 2014). Also, (Wang, Lu, & Lu, 2014) emphasized that negative physical working condition has more detrimental consequence on organizational citizenship behavior for those employees with further traditional values. Thus, this research intends to examine the moderating influence of physical working condition on the link between HPWPs and job performance.

In the context of this research, physical working condition is considered a fitting moderating variable. Ismail, Abdul-Majid, and Joarder (2017) posited that moderating variables do have effects on the HPWPs and Performance relationship as far as the context in which organization operates and the strategic orientations of organizations have a bearing on the application of human resource practices and its impact on performance. The functionality of HR practices is context-dependent because the success or failure of HR systems hinges on working condition (Chadwick, Way, Kerr, & Thacker, 2013). Also, investigating the physical working condition in HPWPs-performance relationship would

yield considerable implications to look up and provide a deeper point of view on what can characterize generalizable findings and commonly-held views in SHRM lookup field, and hence enrich the theories (Goldsby, Knemeyer, Miller, & Wallenburg, 2013). This informs that new findings can emerge if relationship between HPWP's and performance is moderated by a variable that has bearing on performance.

Moreover, physical working condition could have effects on the HPWPs and performance relationship, given the fact that if organization is supportive to employees' physical working condition and shows concern for their feelings and needs, encourages the workers to voice out their worries in work related issues, develop new skills and provide them with positive feedback. Therefore, a conducive working environment assists employees to be dedicated to work and increase interpersonal harmony (Anitha, 2014). As evident in many previous studies, physical working condition is considered to be a robust contributing determinant of job performance (Leblebici, 2012; Madam & Bajwa, 2016). Similarly, the investigation of Jayaweera (2015), revealed that the physical working condition was a strong predictor of job performance. This was also supported by another study which found out that if employees are supported with good physical working conditions, they have a better opportunity to perform optimally (Inuwa, 2017; Awan & Tahir, 2015; Yassin, Ali, Ali, & Adan, 2013a). Additionally, previous studies of Inuwa and Faruq (2017) showed that physical working condition moderated the relationship between job attitude and employee performance of Nigerian university staffs.

Furthermore, studies of Awan and Tahir (2015) emphasized that physical working condition played significant role in organizations because most of the problems faced by employees are related to physical working condition. The degree of productivity can be

extended via developing conducive working surroundings in the organization. Hence, advocated that bodily working circumstance is helpful in increasing employees' level of each employee organizational productiveness and performance. In the overall, prior research of (e.g. Akgunduz, 2015; Jayaweera, 2015; Karanja, 2015; Kim, Jeon, & Park, 2013; Suliman & Harethi, 2013; Swathi, 2013) suggested that future studies should examine the link between working condition and job performance across different job titles. With this, and supported by contingency theory's assumption that the context within which organizations functions count number most, it is therefore anticipated that physical working condition moderates the HPWPs-performance relationship. Hence, this informs that new findings could emerge if the relationship between HPWPs and performance is moderated by a variable that has bearing on performance

From, the above exposition, the current study investigated the effects of HPWPs (recruitment and selection, performance appraisal, compensation, training and development, employee involvement) on job performance in the Nigerian Polytechnics with the moderating effect of physical working condition on the link between HPWPs and job performance in Nigerian Polytechnics. The next two sections that followed highlighted on the research questions and objectives

1.3 Research Questions

Upon the issues stated in the preceding section, the current study is directed by the following questions:

1. Do HPWPs (recruitment and selection, employee involvement, compensation, performance appraisal and training and development,) affect job performance?

2. Does physical working condition moderate the relationship between HPWPs and job performance?

1.4 Research Objectives

Established on the research questions above, this study intends to attain the following objectives:

1. To examine the effect of HPWPs (recruitment and selection, performance appraisal, compensation, training and development, employee involvement) on job performance.
2. To determine the moderating effects of physical working condition on the link between HPWPs and job performance.

1.5 Scope of the Study

The present research aimed at examining the relationship between HPWPs and job performance, highlighting the moderating effect of physical working condition in the Nigerian polytechnics. The study focused on lecturers' performance in the 12 polytechnics located in North-West in Nigeria. The choice of these Nigerian North-West region polytechnics was because the region has the largest population and the most backward regarding educational development (Ehige, Kolade, & Afolabi, 2006; Aminu, 2018) and economic growth (Ndanusa, 2017). Also, the 12 polytechnics in North West Nigeria was selected because they are the second stage of tertiary institutions after universities and government expect them to produce the needed middle-level manpower and technical graduates that will drive the technological and socio-economic development of Nigeria (Ojimba, 2012; Okoye & Arimonu, 2016). The zone comprised of the following seven

states: Sokoto, Jigawa, Katsina, Kaduna, Kano, Kebbi, and Zamfara. And all the Polytechnics in Nigeria are regulated under the same law and the same body that is National Board for Technical Education (NBTE).

Again, the choice of the North West Nigerian polytechnics was to help Nigeria that is striving hard to keep up with other developing countries regarding educational growth and development. Additionally, based on the 2013 data of Nigerian Educational Index computed across the Nigerian geo-political zones, found out that the mean years of schooling was the lowest in the North-West zone and highest in the South-South zone (NHDR, 2015). Thus, individuals were the unit of analysis where only lecturers of polytechnics were selected as respondents because the focus of the research was on the performance of lecturers. This means that respondents of the study cut across all lecturers in those polytechnics. Lecturers were chosen because they are considered as the most cardinal component and stronghold employees in the polytechnics. Similarly, all categories of lecturers were chosen because of their important roles played in supporting, sustaining and development of polytechnics, through teaching and supervision of students, research and innovation, publication, and consultancy services.

1.6 Significance of the Study

The significance of the study contributed in both theory and practice in this research.

1.6.1 Theoretical Significance

Based on the theoretical perspective, the study added to the general body of knowledge by investigating the effect of HPWPs on job performance and incorporating the moderating effects of physical working condition in a single research framework. In particular, the study searched to find out the link between these variables and lecturers' job performance in the Northwestern Nigerian Polytechnics. Therefore, the research served as a foundation for future study and the outcome may help enhance the performance of lecturers.

Secondly, the Social exchange theory was tested in the Nigerian context as opposed to other studies that were conducted in different parts of the world. The social exchange theory explains exchange of benefits and reciprocal relationships between employers (polytechnic) and employees (lecturers). The exchange philosophy explains that if a person gains something from the giving party, the receiving party should return the favor to the giving party (Cropanzano & Mitchell, 2005). SET has been frequently applied in the explanation of HPWPs and performance (Miao et al. 2013). As an essential conception of exchange association between organizations and employees, SET emphasis on the link between the organization and the employees therein as a mutual investment exchange (Blau, 1964; Boselie, 2010; Demortier et al., 2014; Kroon et al., 2013). Thus, SET explained the relationships among HPWPs, physical working condition and job performance in the study. Hence, this theory was tested in the context of Nigerian polytechnics and established the moderating influence of physical working condition on the link between HPWPs and job performance.

Also, the instrument used in measuring the variables under study was another contribution to the measurement as they were tested in the Nigerian context. Most of the studies with these variables about performance and various dependent variables were conducted in the developed countries. Thus, conducting a study in the Nigerian context add to the understanding as to whether the measuring instrument can still be applicable in other contexts different from that of the developed nations. In addition, an effort was made to examine the validity of the constructs of the adapted measurement. The study contributed to the growing body of literature for psychometric properties using the instruments in the developing countries with particular reference to Nigeria. The outcome of the research also provide a basis for future research, by researchers and those in the academia by providing them with empirical evidence on the performance of lecturers in the Nigerian polytechnics.

1.6.2 Practical Significance

Practically, the findings of the research provide a good understanding of the effect of HPWPs on job performance and how physical working condition moderated the relationship. In general, the current study offers empirical evidences on the performance of lecturers in Nigerian polytechnics about the variables under study. With that, management of Nigerian polytechnics, policymakers and stakeholders would realize the roles of lecturers in the improvement of the Nigerian educational sector, particularly in polytechnics. Also, the study would help in providing inputs to the policy makers for making appropriate policies in Nigerian educational sector.

1.7 Definition of Key Terms

Job Performance: Denotes the total expected value to the organization of the discrete behavioral events that an employee carries out over a standard period (Borman & Motowidlo, 1993)

Task Performance: Is defined “as behaviors of employees about the efficiency, quantity, and quality of the core activities that an employee is allocated to perform in the organization (Tsui et al., 1997).

Contextual performance: Refers to the employees’ efforts (action and behaviors) that are outside their job description but yet enhances organizational effectiveness (Motowidlo & Scotter, 1994).

High-Performance Work Practices: This denotes HR constructs (HR Practices) formed to improve employees’ productivity, commitment, and skills in such a way that employees become a source of viable competitive advantage (Datta, Guthrie, Wright, Guthrie, & Wright, 2005).

Recruitment and Selection: This can be seen as searching for employees, motivate them to apply, and select them, aiming to harmonize people’s values, interests, expectations and competences with the characteristics and needs of the role and the organization, while, selection, involves an act of decreasing the range and selecting from amongst these job applicants who have the pertinent qualifications (Armstrong, 2009; Bohlander & Snell, 2007; Bohlander & Snell, 2009; Dessler, 2002; Lievens & Chapman, 2010).

Training and Development: Refers to as providing for employees’ systematic competence acquisition and to stimulate continuous learning and knowledge production

(Bohlander & Snell 2009; Borges-Andrade, Abbad & Mourão, 2006; Dessler, 2002; Dutra, 2001; Truss, Mankin, & Kellither, 2012).

Employee Involvement: Represents an organizationally expressed proposal, with practical and theoretical constructions, to have an effective connection and contribution with the employee's well-being at work, regarding relationship, acknowledgment, participation, and communication (Demo et al., 2012).

Performance appraisal: Means an assessment of employee's competence and performance, supporting decisions about their career planning, development and promotions (Bohlander & Snell, 2009; Dessler, 2002; Devanna, Fombrun & Tichy, 1984; Dutra, 2000).

Compensation: Refers to rewarding of employee's performance and competence through incentives and remunerations (Bohlander & Snell, 2009; Dessler, 2002; Devanna et al., 1984; Dutra, 2001; Gerhart, 2010).

Physical Working Condition: Refers to the physical surroundings that one works within, such as the building facilities as well as the location of the environment (Kuruja & Kabare, 2013).

Polytechnics: This refer to one of the HEIs that is charged with the responsibilities of training middle-level manpower.

1.8 Organization of the Thesis

The present research was classified into five consecutive chapters. Therefore, chapter one comprises of introduction, problem statement, research questions, research objectives,

scope of the studies and significance of the study, definitions of some key terms and lastly, the organization of the thesis was also included in the chapter.

Chapter two discussed the general overview of the related literature on job performance that comprised of: definition, dimensions and measures of job performance, also, conceptual meaning of High Performance Work Practices and its dimensions, underpinning theories and research framework and hypotheses development.

Chapter three also discussed research methodology that comprised of: introduction, research paradigm, research design, population and sampling size, historical/structure of Nigerian polytechnics, operational definition, and data analysis technique.

Chapter four discussed the analysis and findings. Statistical Package for Social Science (SPSS) software was used for data screening and other preliminary analysis. Again, SmartPLS-SEM v3.2.6 software was used for carrying out evaluation measurement and structural models (i.e., indicators loading, composite reliability, convergent validity, discriminant validity, collinearity test, and significance of formative construct, hypotheses testing for both direct and indirect link, assessment of R -square (R^2), effect size (f^2) and predictive relevance (Q^2). SmartPLS-SEM was also used in conducting the moderating analysis for the study.

Chapter five presented the findings and conclusion that was discussed in the research. The chapter also discussed the contributions of this research from different perspectives of both practical and theoretical contributions. The chapter discussed limitations of the study, conclusions and recommendations were offered and Lastly, directions and suggestions for further studies were proffered.

CHAPTER TWO

LITERATURE REVIEW

1.1 Introduction

This chapter presents a review of the related literature that is essential to the research topic. The chapter discussed the concept of job performance, the dimensions of job performance and high-performance work practices. It also highlighted the entire possible links between the independent variable (High-Performance Work Practices) and the dependent variable (job performance). It reviewed empirical studies on job performance and High Performance Work Practices. The possible moderating effect of physical working condition on job performance and underpinning theories were also discussed. The chapter theorizes the key variables of this research and its theoretical framework. Finally, the chapter closed with a summary of the discussion and a brief preview of the subsequent section was given.

2.2 Concept of Job Performance

Job performance is an essential and standard measure in both industrial and organizational researches (Borman & Motowidlo, 1997). According to Organ (1997), job performance has been an important gauge of organizational performance and described in various ways. Jex and Britt (2008) underpinned that usually job performance was restricted to the core task activities that were established on job analysis. But the concept has been stretched out into behavioral aspects that is concerned directly to the core task activities including those behaviors that support the core task. Equally, job performance as a concept has been classified into the task and contextual performance of employees in order to have a comprehensive knowledge of the construct (Borman & Motowidlo, 1993). Similarly,

Hassan (2016) and Jiang et al., (2012), performance believed that is both the result of the action and the activity. This implies that job performance can be measured by the combination of good action, movement, and effort by the employees in the organization. Hence, job performance is a function of work experience that leads to the increase of knowledge, talent, and skills. Also, Koopmans *et al.* (2013) and Erat *et al.* (2012) believed that job performance is the behavior and actions of employees that are under their control. Consequently, Saithong-in, Supapan; Ussahawanitchakit (2016) defined job performance as a function that focuses on the behavior of participants in the work to contribute to the attainment of the objectives.

Equally, Anitha (2014) described job performance to be the non-financial and financial outcome of the worker that is related to the organisation's performance and effectiveness. On the other hand, Jerome, James, and Yahiya (2014) asserted that job performance states the actions and behaviors which explain how the job will be done, as well as the expected satisfactory results. Therefore, it tells how the good job of employees looks like. Thus, job performance is referred to as the level of attaining the desired end for both the individual and organization (Tutar, Altinoz, & Cakiroglu, 2011).

In the opinion of Justine (2015) described job performance as the capacity of employees to execute their duties at various divisional and departmental levels in the organization to achieve objectives. Therefore, it serves as a basis for organizations to measure an individual employee's input and outputs to obtain his/her amount of contribution to the successful attainment of organizational goals. Also, Arowolo (2012) defined job performance as the process that involved a lot of efforts geared towards the execution of a purpose and can be assessed based on a particular standard that determines how bad or

good work is accomplished. Meaning that job performance can either be good or poor. Consequently, Claire, Armstrong, Flood, Guthrie, Liu & Maccurtain (2010) define job performance as the combined result of perception of tasks, ability and effort. In a similar fashion, Ehrlich and Cataldo (2012) maintained that job performance can be seen as the amount of employee contribution to the development of the organization and effective utilization of resources which are made up of material, finance, and machines for organizational growth, success, achievement of goals and objectives. Muda, Rafiki, and Harahap (2014) and Bonsu and Kusi (2014) stated that job performance is the standard routine in organizations or the degree to which employee perform responsibilities, assignments as well as executing given tasks.

Different scholars argued that job performance may be affected by several factors. Earlier, Michael (1988) opined that performance is affected by some factors, including the following: (a) Leadership factors - which include the support, the quality of encouragement as well as the good guidance provided by the team leaders managers in the organization. (b) Contextual factors - this refers to the organizational situational internal and the external environmental changes and pressures. (c) System factors - this refer to the facilities and context of work (instruments of labor) that are provided by the organization. (d) Personal factors - these comprises of the motivation, skill, confidence, and commitment of individuals in the organization. (e) Team factors - this also refer to the quality support obtain from the coworkers. McCloy et al. (1994) explained job performance from the standpoints of three aspects which enable the employee to perform better compared to others, these factors include "procedural knowledge," "declarative knowledge" and "motivation." Put differently, Carlson, Upton, and Seaman (2006)

proposed five HRM practices that may affect performance that include training and development, compensation, performance evaluation, recruitment and preserving morale. On the other hand, Tessema and Soeters (2006) used grievance handling, training, promotion, placement, recruitment and selection, pension and social security and performance evaluation as HRM practices in relation with job performance as eight practices of HR practices. Simply put, this research wants to conclude that performance hinges on a number of factors that are very sensitive and these factors can affect performance in either ways (i.e. either as advantages or even detrimental).

With regards to lecturers' performance, Lucky and Yusoff (2013) defined lecturers' performance as the effectiveness of the overall performance of a lecturer. Halim (2009) sees lecturers' performance as discipline, communication skill with student, classroom management, teaching activities, material mastery, teaching planning, and student's grading as well as teaching evaluation. Similarly, Fan *et al.* (1997) described lecturers' performance as their effectiveness in executing their job or task. Likewise, Mundarti (2007) asserted that lecturers' performance refers to the ability in evaluating, implementing, and planning the teaching-learning process. Thus, lecturers' performance encompasses lecturers' ability in completing a job.

Lecturers' performance involves diverse measures, and this indicates that lecturers are expected to perform different roles. According to World Education Forum (2000) and Halim (2009), the roles of lecturers in higher educational institutions such as polytechnics are: (i). To lecture students in areas assigned by the Head of Department (HOD) which is to be revised from time to time by the HOD. (ii). To make a research and publications, and other output of the research. (iii). To involve with the wider professional and scholarly

communities (iv). to assist in supervising of student. (v).To contribute in planning, implementating, and development of high-quality curriculum.(vi).To participate in marking of exams, assignment, administration. and other the developme.(vii).To participate in faculty and departmental seminars aimed at building interdisciplinary teamwork and sharing research outcomes that is operated within and outside the department.(viii). To assist in keeping records of student progress, preparing schemes of work and development of learning materials. (ix).To provide support and pastoral care to students. (x). Assesses the performance of students. (xi).To participate in committees, faculty, departmental, or working groups as requested. (xii).To help in the management of the department's programmes and other activities. (xiii).To continue maintaining own professional development.

Hence, there is no universal definition of job performance. As shown in table 2.1, researchers have used other terms interchangeably with job performance.

Table 2. 1 *Different Interpretations of Job Performance*

S/N	Authors/Date	Job Performance
1.	Fan et al. (2014)	Employee Job Performance
2.	Nzama (2008)	Work Performance
3.	Koopmans et al. (2013), Sonnentag and Frese (2002) and Cappelli and Rogovsky (1998)	Individual Performance
4.	Gunu and Oladepo (2014), Forunso, Adewale and Abodunde (2014) and Medlin and Green (2010)	Employee Performance
5.	Durrah et al. (2016), Kappagoda et al. 2015 ()	Job Performance

In addition, there are many studies written on job performance. However, the poor performance of lecturers in Nigerian Polytechnics warrants the study of job performance. Moreover, most of the studies on job performance in Nigeria focussed on private sectors,

as stated in the problem statement. The indications of this shortage of research on job performance in the public sector within Nigerian context when compared with studies on private sector necessitate the writing on this topic (Babagana, 2014; Nura, 2014). This study adopted Borman and Motowidlo (1993) definition of job performance. Since, both dimensions of performance are important in achieving organizational aims and objectives, because task performance deals with the behaviours that are necessary to cover job task and contextual performance that is required to maintain and improve both the social and psychological atmosphere in organizations (Borman & Motowidlo, 2000; Van Scotter & Motowidlo, 1996). The section that followed, discusses dimensions of job performance.

2.3 Dimension of Job Performance

Accordingly, scholars looked at job performance from the following dimensions: for instance, Murphy (1989) categorized four classifications of job performance as: (i) Interpersonal behaviours (the behaviour related to interpersonal communication and cooperation with others in the organization) (ii) Task behavior (the behavior related to core task); (iii) Destructive/Hazardous behaviours (the behavior related to the damage, or productivity losses, and others setbacks which are detrimental to the organization); and (iv) Downtime behaviours (the associated with the avoidance of work or assign responsibilities). Campbell and Ford (1990) have classified the concept of job performance into eight different dimensions such as supervision/leadership, crew performance and facilitating peer, non-job-specific mission proficiency, management/administration, job-specific task proficiency, written and oral communications, demonstrating effort, and preserving personal self-discipline. Also, Avey, Nimnicht, and Pigeon (2010) viewed job performance as manager rated

performance and objective performance outcomes. Similarly, Nafei (2015) categorized job performance into three forms: assignment-specific performance, contextual performance and task performance. Equally, the concept of job performance has been considered in terms of counterproductive work behavior; task performance and organizational citizenship behaviors (Sackett, 2002; Rotundo & Sackett, 2002; Viswesvaran & Ones, 2000); job knowledge, leadership effort, administrative competence, interpersonal competence, quality of work, communication competence, productivity, and compliance and acceptance of authority (Viswesvaran, 1993); task and contextual performance (Borman & Motowidlo, 1993a); Adaptive performance, task and contextual performance (Allworth & Hesketh, 1999; Koopmans et al., 2013).

In a related scenario, Murphy (1989) categorized job performance into four major dimensions, which are: interpersonally oriented behaviors (interactions with counterparts and superordinate), task-oriented behaviors (which is associated to individuals assigned duties), destructive or hazardous behaviors and downtime behaviors (these are employees behaviors engaged in their off times). Also, Campbell and Ford (1990) listed eight dimension of job performance that include: task-specific behaviors, supervisory or leadership abilities, communication, efforts, helping others, non-task specific behaviors, personal discipline, and all those aspects of a job which indirectly serve organization's goals.

Also, Borman and Motowidlo, (1993) measured job performance using two categories: task performance or in role performance which refers to the entire obligatory behaviors that include a formal task or formal role requirements of any job. And, contextual

performance that defines the sum of social and psychological behaviors that are not required for a formal role but improve directly towards achieving the aims and objectives of an organization (Rotundo & Sackett, 2000). In addition, Durrah, Alhamoud and Khan(2017) considered job performance in four dimensions namely: scientific research, behavioral performance, educational performance and local community service. Similarly, Allworth and Hesketh (1999) categorized job performance into three classifications that include; (i) Task performance (ii) Contextual performance; and (iii) Adaptive performance. Again, Rotundo and Sackett (2002) categorized three different types of job performance which are; (i) Counterproductive Work Behavior; (ii) Organizational Citizenship Behaviour (OCB); and (iii) Task performance. Equally, Viswesvaran and Ones (2000) further identified three dimensions; (i) Organizational Citizenship behavior (OCB); (ii) Task performance; and (iii) Counterproductive behavior.

Therefore, for this study, job performance was used throughout, comprising of task performance in one hand and contextual performance on the other. And all the other labels were considered as one in this study because they all refer to behaviors and activities of the individual employee which count much on the accomplishment of the aims and objective of the organization and both performance measures emphasised on the behavior that could expect the possible result of such behaviours'. Thus, job performance can be seen as the capability of employees to carry out responsibility, at a given time by using the appropriate procedure and available resources. Based on these, the study is in line with other scholars like Borman and Motowidlo (1993a) and considered the following two divisions of job performance (i.e. task and contextual performance). However, the measurement developed by Borman and Motowidlo (1993) in which job performance is

classified into two dimensions (Task performance and Contextual performance) are considered appropriate in this study, because it has been widely adopted (Koopmans, et al., 2011). Also, scholars such as Jex and Britt (2008) and Van Scotter and Motowidlo (1994) emphasised that job performance should be measured in terms of task and contextual performance so that to capture the complete concept of the construct.

Therefore, task and contextual performance constituted job performance of academics in the Nigerian polytechnics such as teaching, supervision, research and publication, and community service. Hence, both the aspects of performance are very important in achieving the organizational aim and objectives. Additionally, task performance deals with behaviors that are needed to complete core task activities; while, contextual performance (i.e. community services) is used as evident by all Nigerian polytechnics, for mandatory annual measurement and evaluation of academics for promotion. Thus, contextual performance is required to promote and maintain the social, psychological and organizational environment in the organization (Borman & Motowidlo, 2000; Van Scotter & Motowidlo, 1996). In the next sub section, a discussion on Task performance was presented.

2.3.1 Task Performance

Usually, task performance is regarded as first dimension of job performance. According to Koopmans et al., (2013) task performance is the ability to which an employee performs the technical, essential or core task of their job. Similarly, Azmoodeh and Rezaei-dizgah (2015) defined task performance as a set of certain obligations that the employees must

do it to receive their salary or continuity of their employment. Again, task performance is seen as the behaviors explicitly associated with the accomplishment of job-related matters (Johari, Yahya, & Omar, 2009).

Also, task performance can be considered "as the competency or proficiency with which one performs the central job task" (Campbell, 1990). Viewed from another perspective, task performance is described to be "the behaviors that directly contribute or enhance the organization's technical core" (Borman & Motowidlo, 1993). Based on these definitions, it could be deduced that task performance involves behaviors in an organization that directly involved activities of employees in supporting the core function of organization. Therefore, task performance means the behaviors of employees performed to accomplish the assigned task in their job description. For instance, when an employee uses his/her technical skills or knowledge to achieve an assigned task, he/she has engaged in task performance.

Established on review of the existing literature, some other terms that have been used for task performance include: job-specific task proficiency (Campbell & Ford, 1990; Griffin et al., 2007; Wisecarver et al., 2007); In-role performance (Bakker, Demerouti, & Verbeke, 2004; Maxham, Richard & Netemeyer, 2008); Task behavior (Murphy, 1989); Technical proficiency (Lance, Teachout, & Donnelly, 1992) and more recently Individual Work Performance (Linda Koopmans et al., 2011). Also, Campbell and Ford (1990) identified three examples of task performance which includes: Job knowledge, work quality, and work quantity. For this study task performance was used throughout.

Similarly, task performance means the amount of effort that an employee puts into an organizational task under the influence of individual capacity, personal knowledge and role in the organization. A good example of task performance is cooperating to achieve organizational goals; accomplishing objectives and finishing tasks within schedule; efficiency, and attendance; having one's work quality confirmed by directors; affirming partners task performance; making a significant contribution to organization as well as good morale (Murphy, Michael, Robbins, & Sahakian, 2003).

In this study task performance refers to competency, with which employees perform lecturing, research and community services tasks according to the job description. It is sometimes termed as technical proficiency, job specific task proficiency, or in-role performance (Campbell et al. 1990; Campbell & Wiernik, 2015; Griffin, Neal, & Parker, 2007). It includes, for example, work load of lecturers, extent of work quality of lecturers, as well as job awareness of the lecturers. Therefore, lecturers' task performance is associated with their efforts in making unselfish and ample submission of their cognitive ability and use of teaching aids in teaching and learning, research and publication, innovation and community services (Abba & Mugizi, 2018; Ayeni & Afolabi, 2012). Discussions on contextual performance followed in the next subsection.

2.3.2 Contextual Performance

The term contextual performance according to Yousaf, Yang, and Sanders (2015) refers to the behavior of employees that are not formally approved in the organization but affect the broader work environment in a positive way. Also, Koopmans et al. (2011) define

contextual performance as the behaviors that go outside the officially approved work goals, that include: showing initiative, coaching of newcomers and shouldering an additional task on the job. Accordingly, contextual performance can be seen as the employees behavior that support the social, psychological and organizational environment in which the technical task must function (Sonnentag & Frese, 2002). According to Motowidlo and Borman (1997) and Campbell et al., (1993), an excellent example of contextual performance includes: helping and cooperating with other employees in the organization; voluntarily performing task activities that are not part of the employees assign responsibilities like coaching newcomers; supporting organizational objectives; demonstrating efforts and showing initiatives. Hence, contextual performance is therefore a non-formal work behavior which significantly improves the success of direct work results in organizations.

Also, Larbi (2014) defined contextual performance as an aspect of the broader area of job performance that involves behaviors that are not part of an employee's job description but in any case leads to the overall attainment of the organizational aims and objectives. Similarly, Bish and Kabanoff (2014) argued that contextual performance comprises behaviors that are sustaining the psychological, social as well as the organizational context in which the contextual activities are performed, that includes; helping others and volunteering for extra activities. Relatedly, Asiedu-Appiah (2014) explained that contextual performance covers behaviors that add up to the effectiveness of organizations via its influence on the social, psychological and organizational context of work and also influence on others in resolving hostility and conflict, to carry out organizationally valuable work, and encouraging interpersonal trust. Furthermore, Tastan (2014)

maintained that contextual performance are behaviors that are neither formally written nor expected of an employee.

For a reason, contextual performance discussed a non-formal aspect of the job performance such as the use of initiatives as well as voluntarily aspect of performance of employees in the organizational environment. Therefore, contextual performance in this study refers to the employees' efforts (action and behaviors) that are outside their job description, yet improves organizational effectiveness such activities includes: volunteering for extra activities, community services, helping others in their duties etc.

Also, contextual performance is referred to as lecturer's behaviors that sustain the organizational, psychological and social environment in which the mechanical nucleus have to function (Koopmans et al. 2012). Behaviors in this kind of performance include volunteering and demonstrating effort of lecturers during lectures, following rules and procedures, assisting and cooperating with other coworkers, and supporting the organizational objectives. It is sometimes referred to as non-job-specific task proficiency, organizational citizenship behavior, extra-role performance, or interpersonal relations (Koopmans et al. 2011; Campbell, 2005; Murphy, 1989). Having conceptualized task performance and conceptual performance, the sub section that followed provided a detailed discussion on the areas of convergence and divergence between task performance and contextual performance.

2.3.3 Differences and Interrelationship between Task and Contextual performance

Differences and relationships that exist between task and contextual performance are widely discussed in the extant literature that investigates the behaviors at work in organizations (Conway, 1999; Van Scotter & Motowidlo, 1996; Van Scotter, Motowidlo, & Cross, 2000). For example, both the two types of performance (task and contextual) described significant variance in performance ratings. Also, in the study of Motowidlo and Scotter (1994) that investigated advantages as well as making distinctions between both the contextual and task and in organizations; the study recorded a Cronbach alpha 0.95 each for both task and contextual performance. One area of difference between the two performances is that in contextual performance individuals determine when and how to engage in the discretionary behavior; while in the case of task performance the discretion to participate is not within the control of individual employees (Van Scotter et al., 2000).

Another area of difference is that scholars Borman and Motowidlo (1993) and Organ (1997) argued that in contextual performance the personality of an individual is a strong influence when compared with the task performance. Also in another study carried out by Motowidlo and Van Scotter (1994) shows that internal control, work orientation, dependability, and operativeness have a more strong correlation with contextual performance dimension, and low correlation with task performance. Additionally, Van Scotter and Motowidlo (1996) have shown that agreeableness and extroversion accounted for the low variance in task performance and high variance in contextual performance. The paragraph that followed discussed the measures of Job performance.

2.3.4 Measures of Job Performance

Review of literature shows that several studies used various types of measures to assess job performance in different kinds of organization setting (Henri, 2004; Koopmans et al., 2011). Some of the measures include: - self-assessment, team assessment, peer assessment, managers' assessment, management by objective (MBO), 360 degrees or "full-circle" assessment, etc. These measures can be categorized under subjective measure and objective measures.

Objective measures of job performance denote the evaluation of job performance using official records such as archival personnel record or attendance register to determine the frequency of his/her presence or number of times employee attended to his/her duty. While Subjective measures of job performance including rating and ranking of job performance usually by the employee himself (self-rating), his immediate supervisor or peer group. Many studies have used subjective measures to assess job performance in a different context, for example: -

The meta-analytic study, which was conducted by Viswesvaran, Ones, and Schmidt, (1996), indicates inconsistent view that some of the dimensions are rated more reliable than others. Also, supervisory ratings appeared to be at higher inter-rater reliability than that of peer ratings. This is the same with the findings of Rothstein (1990), that the mean inter-rating reliability of supervisory ratings on the whole job performance was found to

be .52 therefore, this signifies that the unsuitable use of intra-rater reliability leads to biased research results.

Earlier, Baird (1977) research examined the connection between employee self-appraisal and superior's ratings of performance. The variance between the two assessments was found to be connected with the worker's self-esteem and his satisfaction with his boss. This finding underscores the effectiveness of employee self-appraisals in decision making.

Also, Heppner, Cook, Wright, and Johnson (1995) surveyed self-appraisal of ability and reviewed 55 research studies in which self-appraisals of ability were compared with measures of performance to show a low mean validity coefficient (mean $r = .29$) with high variability ($SD = .25$). A meta-analysis by the procedures of Hunter, Schmidt, and Jackson (1982) was used to calculate sample-size weighted estimates of r and SD_r and estimated the appropriate adjustments of these values for sampling error and unreliability. Among person variables, high achievement status, high intelligence and internal locus of control were associated with more accurate evaluations.

Likewise, a study was once carried out on the agreement in self- and supervisory rankings of job overall performance by means of Heidemeier Moser (2009), the study recommends a ranking system that would consist of three stages. Also the study advocates for a survey of the empirical proof for the relevance of each of the three steps to an appreciation of agreement in ratings. The reason for the proposed 3-stage model borders on guiding the foundation for the investigation of an all-embracing series of variables that reasonable rater agreement. Indications of rater agreement, bordering on the correlational and mean-level agreement, are stated in the results. Self-supervisor ratings constituted a complete correlation of 0.22. Position features and the adoption of non-judgmental overall

performance pointers have been the most important moderators. Clemency in self-ratings has greater imply tiers of self-ratings in contrast to supervisory ratings. Within Western samples, overall performance self-ratings confirmed leniency dependent on contextual features, scale format, and scale content. This study adopted job performance measures used via Heidemeier Moser (2009) whose research used to explore information from self- and supervisory ratings of job performance. This study adopted it for the truth that researcher will like to gather the facts through self-assessment/self-rating method from lecturers of the North West Nigerian polytechnics which will serve as the unit of evaluation in this study. HPWPs were discussed in detail in the section that followed.

2.4 Conceptual Meaning of HPWPs

Researchers, professionals, and practitioners established that both organizational and job performance can be significantly enhanced through HPWS otherwise known as human resource management (HRM) practices that inspire human capital to acquire both knowledge and skills as well as developing the best talent in the organizations (Posthuma et al., 2013). Therefore, HPWPs refers to HR constructs (HR Practices) formed to improve employees' productivity, commitment, and skills in such a way that employees become a source of viable competitive advantage (Datta, Guthrie, Wright, Guthrie, & Wright, 2005). Also, in this study, HPWS is regarded as HPWPs, given that the concept has attracted various names: advanced human resource management practices (Shin & Konrad, 2017); high involvement management or work systems (Guthrie, Spell, & Nyamori, 2002); alternative work practices (Godard, 2010); high commitment management (Wood & Albanese, 1995); flexible work practices (Osterman, 1994); high investment HR systems

(Lepak, Taylor, Telkfab, Marrone, 2007); people management (Purcell, Kinnie, & Hutchinson, 2003); high performance work organization (Osterman, 2006); flexible production systems (Macduffie, 1995) and employee involvement (Handel & Levine, 2004). Thus, the term HPWS and HPWPs are used interchangeably in this study.

HPWPs represents a declaration that higher performance can be achieved by unseparated or combination of HR practices practices for core employees in an organization (Macky & Boxall, 2007). Also, commonsensical analysis of HPWS concept means the existence work practices that motivate, in many ways, higher organizational performance. Again, Boxall (2012) and Boxall and Macky (2009) stressed that HPWS is a concept that refers to three loosely-fused terms; systemic effects, performance, as well as work practices of some sort. Furthermore, it is usually presumed by researchers such as Godard (2004) and Macky and Boxall (2007) that the success of HPWS is reliant on employee attitudes. Scholars are of different opinions regarding the effects of HPWS on employees' behaviors. Some scholars such as Appelbaum et al. (2000) see a positive outcome for workers while others such as Godard (2004) and White et al., (2003) do not see it that way. Hence, investigating the perception of the employee regarding the HPWS system in the organization remains essential.

Performance of employee which is an offshoot of connections between discretionary effort, employee ability, and performance opportunities and team performance are factors influencing organizational performance. Much of the leading HPWS/HPWPs literature that includes; Vandenberg et al. (1999) and Appelbaum et al. (2000) have indicated that investigation of the performance effects of HPWPs is contingent upon collecting pertinent data on both organization and employee outcomes.

Hence, understanding the meaning of HPWPs will help in goal achievement and enhance supportive employee's behavior that will subsequently improve the benefit and performance of the organizations (Huselid, 1995; Pirzada, Hayat, Ikram, Ayub & Waheed, 2013), particularly as HPWPs denotes HR practices that increase employees efficiency, fitness commitment in the organization (Datta et al., 2005).

As a result, Evans and Davis (2005) described HPWPs as a mixture of HR practices that are both externally and internally reliable: (i) internally constant or assist with HR practices: (ii) and externally consistence aligning with organizational strategy, and consist: selective staffing, open communication, flexible job assignments, performance contingent compensation, decentralized selection making and huge training, and (Guthrie, 2001). Accordingly, Ferreira, Neira, and Vieira (2012) described HPWS/HPWPs as structures of managerial practices that facilitate employee empowerment and expand in incentives and skills that will inspire and allow them to gain from this higher empowerment. Again, HPWS/HPWPs are viewed as a broad range of HR practices that are having the potentials to decorate firm competitive advantage and overall performance (Godard & Delaney, 2016). Similarly, Tekeuchi et al. (2007) described HPWS as a system that is horizontally and vertically fit employment exercise that will inspire employees.

Additionally, HPWPs is defined as the practices that involve some human resource policies that are proposed to increase employees' skills, knowledge and motivation (Kirkman, Lowe, & Yaung 1999). Other scholars such as Becker and Huselid,(1998), Guthrie (2001) and Huselid (1995) conceptualized HPWPs to be a combination of

different but interrelated HR practices that combine, select, develop, motivate and retain a workforce. Equally, Becker and Huselid (1998) emphasized that HPWPs refers to an important asset of human capital made by organizations by providing their employee with skills, training and empowermentsto effectively execute their jobs in their respective organizations.

In addition, Becker and Huselid (2006) maintained that HPWS are human resource practices that if executed collectively will show significant influence on organizational outcomes. Correspondingly, Heffernan, Flood, and Liu (2011) emphasized that HPWS means investment in personnel, good communication systems, promotion on the lines of merit, employee empowerment, fairness in setting pay, job security, performance management, as well as low-status differentials. Likewise, Kroon, Voorde and Timmers (2013) defined HPWPs as human resource management practices that aimed at promoting both the organization and job performance. Consequently, Punia and Garg (2015) asserted that HPWS are means of value creation and value enhancement. Further, Kauhanen (2009) maintained that HPWS is a coherent combination of employee involvement using organizational training, teamwork and incentive pay.

Also, Brown (2006) defined HPWS as an organizational architecture that brings about a fit to generate high performance in light of the adequate response to customer requirements, demands and opportunities found in the environment. Again, Huselid and Rau (1997) defined HPWS as a dependable grouping of policies and practices that guarantees the contribution of the organization's human capital towards achieving the objective of the industry. Similarly, James *et al.* (2008) described HPWS to be a specific

set of HR practices, processes and work structures that improves employee commitment, flexibility, skill and knowledge.

Likewise, HPWS/HPWP is defined as the employment of mutually strengthened HRM practices in a systematic manner which emphasizes the development of employee skills, selection of qualified employees, and arranging work so that they have the autonomy to resolve issues in a creative way, and the utilization of reward systems that encourage employees effective performance to achieve organizational aims (Harley, Allen, & Sargent, 2007).

From the above definitions, HPWS can be referred to as HRM practices that guarantee the superior managerial outcome and employee work experience (Harley, Allen, & Sargent, 2007). Despite the similarities among compartments within HPWS and HR practices, there is a significant difference in the system and approach. For instance, HR practices are distributed through work and tasks, while HPWS are combined parts which function together to attain the goal and objectives of the organization of any size (Evans & Davis, 2005).

The goal behind HPWS is the creation of a system where employees control and monitor themselves (Altman, 2015). Several empirical studies examined on the usefulness of HPWS in enhancing performance, established that organizations adopting HPWS show better performance compared to those that adopt traditional management practices (Altman, 2015). HPWSs help to bring about superior employee autonomy, satisfaction, and performance as they concentrate on employees' work and responsibility (Harley,

Allen, & Sargent, 2007). The HPWS concepts are shown in a variety of employee empowerment, formal training programs, organizational performance and performance-based compensation (Vogus, 2004). Also, HPWS is expected to entail varied job tasks, strict and selective staffing, performance appraisal based on merit and development and extensive benefits (Takeuchi et al., 2007).

HPWPs mainly functions through several management tools like equipping employees with the required skills, distributing important information to them, and encouraging the employees to perform better and thus developing employee team that is significantly robust, capable and competitive (Guthrie, Spell, & Nyamori, 2002). In the context of a traditional management system, employees are considered as unthinking agents reflecting norms and values laid down by the owner or the manager (Altman, 2015). A new theoretical framework for management also emerged along with HPWS that concentrates on the notion of deep owner motivation (Altman, 2006). Deep owner motivation refers to motivation felt by employees who are owners rather than agents of the organization in more than a financial/legal sense. Employees who perceive this type of motivation experience high psychological energy if their organizations equip them with the chance to realize self-actualization. This occurs if the employee is linked with the organization in a meaningful way through a common destiny, core values, spirit and mission (Altman, 2006).

In respect to prior studies, the HPWS characteristic can be summarized as a work organization that offers employees the chance of participation in decision making and human resource practices that provide the workforce with skills as well as incentives for active involvement (Bailey & Merritt, 1992).

As such various studies have given different definitions of HPWS and some of these definitions are summarized in table 2.4 that followed.

Table 2. 2
The concept of HPWPs

Year	Authors	Concept of HPWPs
1994	Appelbaum & Batt	Practices that comprises selective hiring, extensive training, contingent pay, workplace, empowerment, reduce status differentials as well as information sharing.
1995	Huselid	A team of separate however unified human resource practices aim to improve employee's capabilities and effort.
1996	Becker & Gerhart	Practices with natural factors such as through and coherent recruitment and selection process, contingent pay and training program that is focus on the need of the organization.
1997	Huselid & Becker	Strategic force for developing and sustaining organization core competencies and strategic implementation.
1998	Becker & Huselid	Distinct set of unified human resource management practices that collectively select, retain, develop and motivate employees: (i) with better ability (ii) make use of their ability towards work related activities and (iii) whose work related behavior results in firms' achievement of better performance.
1999	Bat	Planned approach by organization to invest in its human capital
2000	Godard & Delaney	Wide range of human resource management practices having the potentials of enhancing firm competitive advantage and performance.
2004	Godard	Best and innovative practice associated with high level of performance than traditional workplace and employment related practices.
2005	Datto, Guthrie & Wright	Innovative human resource practices that are intended to enhance employee's skills, loyalty and productivity in such that employees become a source of competitive advantage for the organization.
2006	Becker & Huselid	HR practices that once executed collectively show a significant effect on organizational outcome.
2006	Lepak, Liao, Chung, & Harden	HR policies and practices designed to build a incredibly skilled, engaged, and dedicated group of

			workers that amplify productivity, enhance morale, decrease turnover, and enhance decision making.
2007	Bohlander & Snell		A specific combination of HR practices, work structures, and processes that maximizes employee knowledge, skill, commitment, and flexibility'
2007	Takeuchi, et al.,		A system that is horizontally and vertically fit employment practice that will motivate employees.
2009	Cheng-Hua, Shyh- jer & Shih-Chien		Empowering employees, with high task autonomy, decreasing job title and level of management, putting into practice extensive training program with high employee selectivity, promoting information sharing programs, utilizing performance based pay as well as applying gain sharing plan.
2009	Kauhanen		Coherent combination of employee involvement using teamwork, organizational training and incentive pay.
2011	Heffernan, Flood & Liu		A focus on investment in people, worker empowerment, appropriate communication system, overall performance management, fairness in placing pay, promotion on the strains of merit, job security, as well as low status differentials.
2012	Punia & Garg		A means of value creation and value enhancement.
2013	Kroon, Van De Voorde & Timmers		Human resource management practices aimed at promoting both employee and organizational performance.
2015	Mazzei, Flynn & Haynie		A mechanisms used to cultivate an entrepreneurial culture, whereby innovative behaviors are section of daily routines, and these HR practices (onboarding, higher autonomy, monetary incentives, low-status differentials, and job security) guide employees toward these preferred actions that are known to enhance innovation by way of producing higher commitment.
2016	Karatepe & Olusegun		HPWP refers to solid combination of selective staffing, job security, teamwork, and Career opportunities.
2017	Ismail, Abdul Majid, Abdul Rahman & Jamaluddin.		HPWPs or HR practices that comprises of & Development, Job Design/Autonomy, Pay-For-Performance, Non-Financial Reward and Employee Participation & Communication that boost employee competencies, commitment, and productivity an organization.
2018	Hoque, Wass, Bacon & Jones		HPWPs that includes, competency testing, performance appraisal, individual performance-related pay, team working, and functional flexibility
2019	Brinck, Otten & Hauff		HPWPs that represent incentives, compensation, job design, work teams, worker involvement, training,

selection, recruitment, job security, formal grievance and grievance processes, information-sharing, performance appraisal, as properly as promotion and professional development.

Moreover, researchers have classified HPWS practices into two: (a) High commitment work practices (behavior base appraisal, advanced training, and development); and (b) alternative work practice (job enrichment, participatory practices, rotated job design). In addition, Thompson (2001) has categorized HPWPs into three: (i) trusted and committed employees relation that may assist in addressing their complaints, (ii) human resource practices that create the employees skills and motivation, continuous performance appraisal as well as the ability to conduct formal recruitment and interview; and (iii) high involvement practice which involves problem-solving and a semi-independent team. Again, scholars such as Kirkman, Lowe, and Young (1999) have grouped all the HPWPs into five elements which are: (i) total quality management; (ii) employee involvement, participation, and empowerment; (iii) learning organization; (iv) Self-managing work teams; and (v) integrated production technologies.

Also, Jayaram, Droge and Vickery (1999) have outlined the ten dimensions of HPWS for improving the performance of the organization. Which are: (i) employee effect (ii) cross-functional teams (iii) top management commitment (iv) Communication of goals (v) cross training (vi) employee autonomy (vii) employee Training (viii) broad jobs (ix) open organizations, and (x) effective labor-management relations. Further, Evans and Davis (2005) argued that HPWS involves practices such as decentralized decision making, flexible job assignments, selective staffing, open communication, self-managed teams, extensive training, and performance-contingent compensation. On the contrary, Zhang,

Fan and Zhu (2014) identified: win-win HPWS and profit-oriented HPWS. It is clear that from the above definition and categorization. Many scholars viewed HPWS in different ways subject to their context of research, stressing on practices that are in line with the employees or organizational performance improvement. The following sub section explained in detail, the selection pattern of the measures of HPWPs in this study.

2.4.1 Selection of Measurements for HPWPs

Researchers such as Drummond and Stone, (2007); Edwards and Ram (2006) and Punia and Garg (2012) have maintained that HPWS should be studied and be considered in a multidimensional way for an improved understanding, on how each element has appropriately contributed to their context. Based on this statement the study will use multidimensional measurement to investigative HPWPs. Hence, in this research the HPWPs are recruitment and selection, performance appraisal, compensation, training and development and employee involvement. These practices will be chosen and test their effects in the context of Nigerian HEIs, especially in the polytechnics. As advised by researchers such as Edwards et al. (2006) that the dimensions of HPWPs can be chosen based on their importance to the context of the study. Also, the HPWPs had been validated in a different context and discovered to be important HPWPs. Also, the researcher believes that these HPWPs (recruitment and selection, compensation, performance appraisal, training and development and employee involvement) should also play substantial roles in the context of Nigerian polytechnics since they mainly centered on the problems of performance surrounding the Nigerian polytechnics.

According to literature, there are no generally acceptable sets of HPWPs; on the basis of that, Edwards, Ram, Sen, Gupta and Tsai (2006) stated that different sets of HPWPs have been used by scholars suitable to their context. Drummond and Stone (2007), Punia and Garg (2012) and Zhang et al.(2014) have suggested for broader sets of HPWPs. Therefore, in understanding HPWPs, there is need to know how previous researchers select measures of HPWPs, and why the researchers choose a multidimensional approach. Table 2.3 provides the summary of previous studies on HPWS/ HPWPs.



UUM
Universiti Utara Malaysia

Table 2. 3

Summary of Some Selected Previous Studies on HPWS/ HPWPs

S/N	Author/Year	Country	IV	DV	Mediator/ Moderator	Analysis
1.	Luna-Arocas & Camps (2007)	Spain	Salary, Job enrichment & job security	Turnover intention		SEM
2.	Beltran-Martin, Roca-Puig, Escrig Tena, & Bou-Llusar (2008)	Spain	HPWS (selective comprehensive development equitable reward system & performance-based pay)	Organizational performance		SEM
3.	Kauhanen (2009)	Finland	Socioeconomic status, communication technology	HPWS, adaptive teams		Regression
4.	Messersmith, & Guthrie (2010)	USA	Selective training and development, performance management.	Firm performance		Ordinary least square regression.
5.	Shih, Chiang, & Hsu, (2010)	China	HIWS, perceived family conflict, Job satisfaction and supervisor rating.	Expatriate job performance.		SEM
6.	Armstrong, Flood, Guthrie, Liu, Maccurtain & Mkmwa (2010)	Ireland	HPWS, Diversity/equality Management	Organizational performance.		OLS regression analysis
7.	Wood & de Menezes (2011)	UK	HPWS (enriched jobs, high involvement management, employee voice & motivational support)	Well-being (job satisfaction & anxiety-contentment)		Weighted hierarchical Multiple regression.
8.	Wang, Law er & Zhan 2011	China	HPWS (training teamwork & worker empowerment)	Organizational commitment		Factor analysis

9.	Punia & Garg (2012)	India	Employee awareness Segmentation Motivation	Employee HPWSs, HPWP	Factor analysis
10.	Jyoti & Dev (2016)	India	Ability, Opportunity	Employee HPWS: Ability, Opportunity & Performance intention.	Ordinary least squares regression
11.	Jensen, Patel, & Messersmith, (2013)	USA Romania	HPWS perception, HPWS Utilization,	Regression Analysis.	SEM & confirmatory factor analysis
12.	Karatepe (2013)		empowerment, Job reward	performance & extra role customer service HPWS	Ordinary least square regression.
13.	Stirpe, Bonache, & Revilla, (2014)	Britain Dublin	Contingent Employment		
14.	NaFu (2013)	& China	Staffing, development, performance communication participation.	training & Firm compensation, performance control & commitment	Affective structural equation modeling
15.	Zhang Di Fan & Zhu (2014)	Canada	Corporate Social Performance	OCB, commitment	
16.	Shin (2014)		Training, Compensation, Benefit and Work Design.	Organizational performance output:	
17.	Iyanda, Abdelrahman & Abdul-Majid (2018)	Nigeria	Selective hiring, *training & development, *performance appraisal.	Organizational output: Mediator: Employee Creativity	

		*pay for performance *succession planning.	Financial & Non-Financial Performance Employee outcomes	Mediator: Work engagement
18. Karatepe & Olugbade, (2016)	Nigeria	HPWP: Selective staffing, job security, teamwork and career opportunities		



UUM
Universiti Utara Malaysia

According to Ismail, Abdelrahman and Abdul-Majid (2018) future studies should investigate employees' perspective regarding HPWS/HPWPs and performance relationship which will constitute a viable research direction. For the reason that examining employee' perspectives on HPWS/HPWPs-performance relationship will expand the understanding and enrich the body of knowledge in the research field.

This research selected a set of five HPWPs. The rationale behind this selection is explained by the fact that the scholars have suggested for further studies concerning the selected HPWPs in this study. For example, HPWPs such as training and development (Jibrin-Bida & Abdul-Majid, 2017; Cobblah & Walt, 2017; Bonsu & Kusi, 2014; Falola, Osibanjo & Ojo, 2014; Nadeem, Ahmad, Ahmad & Abdullahi, 2015; Javed, Balouch & Hassan, 2014); compensation (Bonsu & Kusi, 2014; Rapp, Agnihotri, Bakker & Anzulis, 2015; Nadeem, Ahmad, Ahmad & Abdullahi, 2015; Javed, Balouch & Hassan, 2014); performance appraisal (Babagana, 2014; Cobblah & Walt, 2016) and job performance.

Likewise, other scholars suggested for future research concerning HPWPs such as employee involvement (Tabiu, Pangil & Othman, 2016; Fasasi & Oyeniran, 2016; Nadeem, Ahmad, Ahmad & Abdullahi, 2015); recruitment and selection (Jibrin-Bida & Abdul-Majid, 2017; Tabiu, Pangil & Othman, 2016) and job performance. Hence, the effectiveness of HPWPs depends on their relationship with one another (McDuffie, 1995).

Therefore, the present study will investigate the relationship between five (5) HPWPs (recruitment and selection, compensation, performance appraisal, training and development and employee involvement) as independent variables and job performance.

This is consistent with Ismail et al. (2018), Rasool and Nouman (2013), Jibrin-Bida et al. (2018), Amin et al. (2014) and Sudin (2004) that HPWPs such as recruitment and selection, compensation, performance appraisal, training and development and employee involvement will exert greater influence on job performance when collectively used by organizations to enhance performance. Based on the ability, motivation, and opportunity (AMO) theory which proposed that performance of an employee is a function of employee ability, motivation and opportunity ($\text{Performance} = A \times M \times O$) (Appelbaum et al., 2000; Bailey, 1993).

Furthermore, it is usually premised by research such as Godard (2004) and Macky and Boxall (2007) that the success of HPWS is contingent on employee attitudes. There is different opinion by scholars concerning the influences HPWS on employees' behaviors. Therefore, some scholars like Appelbaum et al. (2000) observed a positive outcome for workers while on the contrary scholars like White, Hill, McGovern, Mills, and Smeaton (2003) and Godard (2004) do not perceive it that way. Thus, examining employee perception regarding the HPWS system in the organization remains important.

2.4.1.1 Recruitment and Selection

French and Rumbles (2010), defined recruitment as the act of producing capable personnel to apply for employment in an organization; Again, recruitment and selection can be viewed as any undertaking or exercise engaged in by means of an organization with the main motive of recognizing and attracting potential employees (Noe et al., 2008). Therefore, recruitment is an essential feature of an organization due to the fact it brings collectively each managers and employees. Also, recruitment integrates all the complete

activities that managers engage in creating certified candidates for appropriate positions (Jones & George, 2006).

Human resource management is poised to inspire an employee who has knowledge, skills, and ability which will aid organizations to attain their targets. It borders on the process of gauging and evaluating information about potential employees' qualifications for a certain job position in the firms (Berntha & Wellins, 2001; Shanthi, 2010). Also, it is upheld that recruitment is the act of maintenance and development of sufficient manpower resources needed in an organization that occupies the creation of available workforce (Flippo, 1980; Beach, 2010).

Regarding the term selection, it refers to the process in which the numbers of the job applicants are reduced, and applicants with the best qualifications are chosen (Bohlander & Snell, 2007). In another perspective, selection is the process where managers of the organization use clear tools to select from a pool of recruited interviewees. It often begins where recruitment ends. The main aim is to determine the best applicant to be employed. An arrangement that involves assessment of firms' choice of the employee to be hired in a given time represents what is known as selection (Dsouza, 2010; Harshalsk, 2010; Riccio *et al.*, 2008). Likewise, selection borders on a process of organizing several methods in selecting a fitting individuals to man the job. Besides, it is bothersome when the applicants that meet the requirements for employment are more than required. Also, Babagana (2014) cited Paauwe and Richardson's (1997) effective recruitment and selection is connected with employee commitment, motivation and satisfaction, and thus, leading to enhanced job performance and productivity.

Significant numbers of empirical studies have links with recruitment and selection and job performance. To be specific, Tabiu and Nura (2013) and Marwat *et al.* (2007) proven that recruitment and selection variable is positively related to job performance. Also, Kepha *et al.* (2014) carried out a research in five government-owned research institutes in Kenya on the link between recruitment and selection and job performance. They distributed a total number of 256 questionnaires, and only 184 were returned representing 71.9% rate of return. The study employed descriptive and correlation research design. The findings of the research showed a link between recruitment and selection and job performance was highly significant.

Saleem and Khurshid (2014) carried out a research on the effect of recruitment and selection, compensation and training and development job performance in the banking sector of Pakistan. The result of correlation analysis indicates strong positive connection among recruitment and selection and job performance. Also, Babagana (2014) studies the impact of recruitment and selection on polytechnics in Nigeria. The findings of the studies show a positive link between recruitment, and selection and job performance.

Amidst several definitions reviewed in this segment one would be able to deduce that for performance to be positively improved, right calibre of individuals needs to be searched, secured and convinced to fill the vacant positions based on the specifications of organizations. Discussions on Training and Development followed in the next sub section.

2.4.1.2 Training and Development

According to Bhatti and Kaur (2010) and Vlachos (2008) training and development is among the vital and unfailing element of human resource management technique that improve productivity. Similarly, Posthuma et al. (2013) stressed that training and development involve the practices designed to enhance employee's ability and skills necessary for the performance of future and present tasks. Likewise, Ulrich (1997) emphasized that organizations should give importance to training and development for their employees to have the opportunity in achieving new skills to obtain optimum performance. Hence, training and development become an essential factor in the HPWS system due to its direct influence on the functional ability of the organization (Truss, 2001). Also, organizations normally used training and development in improving domain- and creativity-relevant skills of organization employees. Therefore, organizations train their employees to increase the creativity, intrinsic motivation and consequently advancing employees' feeling of competence. (Ryan & Deci, 2000).

In addition, training and development have been acknowledged to be among the essential segments of HRM practices in the field of HRM (Joarder, Sharif, & Ahmmed, 2011). Again, Edralin (2004) explained training as special activities intended to help to learn of skills, attitude and knowledge between the employees in the organization to enhance their specific work performances and achieving organizational goals. Organizations put in training as a package to ensure and develop their employees' output (Gattiker, 1995), training is seen as a strategic effort by the organization to enable employees' learning job-related behavior on the part of its personnel (Cho & Yoon, 2009). On the other hand,

development activities are aimed at the long-term by preparing future work responsibilities and the current work as well. Training and development focus on technical training, skills, counseling and other developmental programs (Truss, Mankin, & Kelliher, 2012).

Also, based on the explanation of Walsworth and Verma (2007) regular jobs will become exciting and engaging if training is designed towards enhanced job-knowledge and idea generation skills. Enhanced job-knowledge and abilities for generalisation of ideas aids development of a new approach to routine tasks and then make them interesting, fun and engaging. This practice has been empirically tested and found to have positive effects on creativity and innovation (Walsworth & Verma, 2007). These scholarly explanations on training and development as provided by scholars indicates that there is no one best way to train, it all boils down to the training needs, caliber of employees as well as organizational goals and objectives

2.4.1.3 Compensation

Compensation is regarded to be among the essential HR practices and is explained in many ways by different researchers. For example, Milkovich, Newman and Gerhart (2013) define compensation as all kinds of fiscal returns and physical benefits that an employee received as part of his/her contract. However, this definition is deficient as it does not consider other elements of compensation like non-financial aspects. Therefore Anitha (2014) defined compensation as an essential feature of employee engagement which involves non-financial and financial that motivates employees to achieve and focus more on work and personal development. Similarly, compensation can be seen as HRM

practice that involves with all type of rewards obtained by workers in organizations for exchange of what they performed to attaining organizational goals (John & Qian, 2003).

In designing compensation, employees' factors should be taken into consideration. This is because not all employees would prefer a particular form of compensation. For example, formal education's level, experience, and training of the workers determine the kind of compensation that such employee will prefer. In another word, Ortín-Ángel and Salas-Fumás (2007) stressed that the kind of compensations given to employee one might be different from the compensation that will be given to employee two. It is therefore based on their formal education level and category, experience and training (Pedro & Vicente, 2007).

Also, compensation refers to as direct and indirect instalments, financial and non-money related rewards and money and non-money instalments, those remuneration is utilized for compensating representatives who act in their work or administration (Noe, Hollenbeck, Gerhart & Wright, 2004). Interestingly, all types of monetary returns and substantial administrative representation gets as a major aspect of work relationship. It might very well be viewed as a proportion of equity; ordinarily, it is the significant wellspring of representatives' budgetary security (Milkovich & Newman, 2008). Performance Appraisal has been extensively discussed in the next sub section.

2.4.1.4 Performance Appraisal

Numerous scholars, such as Akinbowale, Jinabhai, and Lourens (2013), defined performance appraisal as assessing of personnel on how nicely they do their jobs based on the overall performance scale. Also, performance appraisal is believed to be a key that

furnish an encouragement to the proficient personnel to be thrilled with the organization (Joarder & Ashraf, 2012). Again, performance appraisal can be described as a non-stop process, not just a year of exercise. It is the reliable system of time to time comparison and assessment of a worker or group's job performance and makes positive that feedback is furnished when due (Zohurul & Siengthai, 2010). In general, overall performance appraisal is a procedure in which organizations consider the employees to find out their performance level as well as the use of it as an instrument for organizational decision making, firing and upgrading of the personnel in the organizations.

Performance Appraisal (PA) refers to strategies and procedures utilized by organizations to survey the degree of execution of their workers and to give them a criticism. This procedure can be utilized for both formative and authoritative purposes (Van Dijk, 2015).

Further, Zohurul and Siengthai (2010) defined performance appraisal as an individual job performance time to time evaluation and assessment to determine their levels and areas requiring improvement. This definition is supported by Obisi (2011), who noted that every organization should ensure that the individual worker is enlightened about his functions and responsibilities to facilitate an optimally working performance appraisal. Likewise, performance appraisal is seen as the fundamental tool to provide incentives to the talented person to be satisfied with the organization (Joarder & Ashraf, 2012). Hence, Performance appraisal constituted a substantial portion of performance management in which performance of employees are developed, defined, stimulated and gauged (DeNisi & Pritchard, 2006). Also, performance appraisal is designed for the reason of evaluating workers' performance correctly and entirely. It is distinct, formal, and organizationally sanctioned which commonly happens once or twice per year. The evaluation process in

the performance appraisal includes the adoption of performance dimensions and yardsticks against which the evaluation will be done (DeNisi & Pritchard, 2006).

Accordingly, Zhang and Li (2009) emphasized that performance appraisal will become an essential practice, given the fact that it can align group overall performance and individual with organizational strategies. Yet again, appraisal practices incorporate regular feedback primarily based on organization goals, managing targets and group that are tied to organizational strategy. Performance appraisal stimulates creative behaviors on the phase of an employee due to the fact the worker is conscious that behaviors are assessed and linked to performance. Feedback on universal performance is beneficial for evaluating employee's overall performance state as feedback on precise job components is useful for the employee who aims at performance enhancement (Pritchard, Ashwood, & Weaver, 2012).

Performance appraisal aims to improve business efficiency through the mobilization of optimum efforts of individuals working in it. Therefore, these appraisals are catered to achieving four aims namely: planning job rotation, development and training, assisting promotions and salary reviews. Specifically, Atiomo (2000) claimed that regardless of the frequent contention of the performance appraisal-pay relationship, it can translate into a host of objectives such as improving communication, identifying training needs, determining employee pay, improving present performance, improving potentials and motivating employees. A worker is motivated through performance appraisal to enhance his/her KSAs and to contribute to maximum output based on work satisfaction (Combs *et al.*, 2006). Thus, Mehdi *et al.* (2011) pointed out that HPWPs are also related to an

incentive regime wherein the incentives are provided with performance appraisal as the essential. Discussions on Employee involvement followed in the next sub-section.

2.4.1.5 Employee Involvement

Employee involvement refers to the process through which information is exchanged in an organization (Posthuma et al., 2013). The practice had been found to affect creativity climate. Heffernan, Harney, Cafferkey and Dundon (2016), and organizational performance (Gittell, Seidner, & Wimbush, 2010). Also, Demo et al. (2012) defined employee involvement as an organizationally expressed proposal, with practical and theoretical constructions, to have an effective connection and contribution with the employees well-being at work, regarding relationship, acknowledgment, participation, and communication.

Reasonably, expecting the employee to perform a task, the instruction must be given to the concerned employee. In the same manner, if the performance of the organization is to be accomplished, there is a need for communication of organizational goals and strategy to the employees. Workers should be equipped with financial and strategic information of the organization to improve and enrich workers' job-related knowledge.

2.5 Physical Working Condition

Satisfaction either of an individual employee or an organization, in general, cannot be attained without some convenience and pleasant experience that an employee has relating to his job. In the words of Bakotić and Tomislav, (2013), physical working conditions are integral parts of job satisfaction because as they argued, employees fancy physical

working conditions which are not unsafe and unpleasant and prefer physical working conditions which are comparable to the circumstances that they have in their households. Moreover, researches have exposed a connection between physical working conditions and performance (Newsham et al., 2009). Brenner (2004) defined physical working condition "the capability to share knowledge throughout organizations depends on how the physical working is designed and enable organizations to utilize work environment as if it were an asset. These facilitates are valid for organizations to enhance effectiveness and permit employees to benefit from collective knowledge".

Also, Brenner (2004) emphasized that a physical working condition depicts an environment designed that is suitable for employee's satisfaction and the free flow of transaction of ideas; it is a better way of motivating employees towards the higher output. Additionally, physical working condition can be an arranged area that is provided by the establishment for attaining organizational objectives (Amir, 2010). More so, Nze (2009) emphasized that physical working condition comprises of modern and well-equipped buildings, classroom maintenance, presence of adequate instructional materials and library supplies, space and furniture availability, electricity and clean water supplies etc. And this is the factor that best brings about lecturers' performance and quality education in any part of the world and Nigeria inclusive. An organized area can be described as the layout of a workspace which suits the nature of the job or task that is to be performed. It can have an office layout with cabinets, chairs, desks and cubicles or just a work table with a wall fitted with all categories of hand tools which fits a workshop. The appropriate kind of working environment is required to attract users to feel comfortable, thereby enabling them to work effectively. Also, Ajala (2012), buttressed that an environment is

the immediate surroundings of a user which is influenced for their existence or use. Therefore, working condition offers an environment to the worker to perform a given task. Correspondingly, Yassin *et al.* (2013a) physical working condition denote the work environment, as all the existing condition that is affecting employment in the workplace. Again, Yassin, Ali, Ali, and Adan (2013b) maintained that physical working conditions are essential to the organization. Therefore, if employees have a negative impression of their working conditions, they are likely to be absent, have a stress-related illness, absent, and their commitment and productivity tend to be low. Alternatively, those organizations with a befitting working condition tend to be having a friendly, experience, greater communication, creativity, trusting and safe environment and financial health and productivity.

Also, Kiruja and Kabare (2013) defined physical working conditions as the physical surroundings in which one works within, that includes the location or facilities. In the same manner, Gerber (1998) pointed out that creation of working conditions can be through the inter-relation of an employee through their organizational climates that comprise both physical and psychological working conditions. It also involves working environment and aspects of an employee's terms and conditions of employment, which implied that the collaboration of employees fashions working condition through their organizational climates.

Further, John and Robbert, (2013) refer to physical working condition as the environmental factors such as hazards, heat, ventilation, noise and cleanliness. Likewise, Klitzman and Stellman, (1989) posited that working conditions refer to the factors that consist of both the physical environment and psycho-social well-being that may affect the

effort of employees in a working place. Taiwo (2010) categorized working conditions into three major sub-environments: firstly, the human environment refers to peers and others with whom employees relate, the leadership, team and work groups, management and interactional issues. Secondly, technical environment which relates it to the equipment, tools, physical and technical elements and other technological infrastructure. Also, the technical environment creates fundamentals that allow employees to carry out their respective activities and responsibilities. Thirdly, an organizational environment which consists of: values, practices, procedures, philosophies and systems. Also, management has control over the organizational environment. Hence, the issues of organizational environment affect employee's productivity.

However, in another context Abdul and Awan (2015), revealed two types of a working conditions that includes: behavioral and physical component. Behavioral component involves components that are related to the connectivity between users in the same work environment and the effect of the working environment on the user's behavior, while, Physical component comprises of elements that are related to the connectivity of the user with their office environment. Further, Amir (2010) and Naharuddin (2013) identified two main elements that are connected to the physical working condition which includes; the office layout plan and also the office comfort. The author further explained that a physical workplace is an area in an organization that is being arranged to achieve the organizational objectives.

Also, Noah and Steve (2012), defined physical working condition as the sum of forces, actions and other influential elements that are currently and, or potentially challenging with the performance and activities of employees. Al-Omari and Okasheh (2017)

explained physical working condition as anything that exists around the employee and as well can affect the performance of his duties. According to Sujarwo, Cicihratnasih, and Sodikin (2018), a decent physical working condition is a condition where individuals can do their jobs in a secured, healthy, ideal, and comfortable way. Thus, several research categorize physical working condition into conducive and toxic environments (Akinyele, 2010; Al-Omari & Okasheh, 2017).

Consequently, Yassin et al. (2013) postulate that when a non-monetary physical working condition is linked with higher performance, the employer should pay extra for the added output of employees to retain them. Again, Yassin et al. (2013) discovered that for any organization in which employees are covered to stressful physical working conditions, the performances of the employees are negatively effected and that there is going to be a corresponding negative effect on the delivery of service. Also, if physical working conditions are favorable and good, performances improve, and there is going to be a positive and encouraging effect on the distribution and accomplishment of service.

However, in this context, physical working condition was considered fitting, given that the population of the study, the polytechnic lecturers perceived physical condition, in terms of poor conditions of lecture halls, offices and surroundings of the polytechnics in Nigeria. Scholars, such as Isa, Zahari, and Yusoff (2015), Babatope (2010); Musa and Baharum (2012); Ndirangu and Udoto (2011) stated that, unfavorable and dilapidated physical facilities such as building for academic activities, furniture, toilet facilities and lighting brought about low performance of lecturers in Nigerian polytechnics. An elaborate discussion on the underpinning theory used in this study was provided in the section that followed.

2.6 Underpinning Theory

In this research Social Exchange Theory (SET) was considered to underpin the research work. Therefore, social exchange theory grounds the link between the constructs in the research model of the study.

Social exchange theory (SET) origin is traceable to the 1920s (Malinowski, 1922; Mauss, 1954). The theory was built on the idea that it provides the essential basis for the understanding of workplace behavior often used in the management discipline (Blau, 1964). In addition, SET explains exchange of benefits and reciprocal relationships between employers (polytechnics) and employees (lecturers). The exchange philosophy explains that if a person gains something from the giving party, the receiving party should return the favor to the giving party (Cropanzano & Mitchell, 2005). SET has been frequently applied in the explanation of HPWS and performance (Miao et al. 2013). As an essential conception of exchange association between organizations and employees, SET emphasized on the link between the organization and the employees therein as a mutual investment exchange (Blau, 1964; Boselie, 2010; Demortier et al., 2014; Kroon et al., 2013). Thus, SET will explain the relationships among HPWS, physical working condition and job performance in this proposed study.

Additionally, SET postulated that links develop over time into faithful, worthy and loyal commitments (Cropanzano & Mitchell, 2005). Therefore, to form such commitments, people must obey rules of exchange. This exchange ideology explains that if a person gains something from the giving party, the receiving party should return the favour to the giving party (Cropanzano & Mitchell, 2005). When an employee sees the organization as

supportive, he or she will presumably also be supportive towards the organization (Cropanzano & Mitchell, 2005). There would be effort, devotion and enhanced employee performance in exchange for material benefits and social rewards (Eisenberger, Fasolo, & Davis-LaMastro, 1990). Also, SET postulates that employees are more motivated to reciprocate good gesture in return. This theory underscores the rules of exchange.

Furthermore, researchers such as Bailey and Merritt (1992), Marin-Garcia & Tomas (2016) and Martin-Alcazar et al. (2005) earlier projected that AMO model and contingency theory can also explain how HPWPs influence job performance and be used in selecting variables which is commonly accepted in Human Resource Management for explaining the relationship between job performance and HR practices (Demortier, Delobbe, & El Akremi, 2014; Marin-Garcia & Tomas, 2016). Therefore, under AMO performance of employees can be explained through three factors which are Ability, Motivation and Opportunity. AMO model suggested that motivated and empowered employees with boosted knowledge, skills and abilities would record higher performance and remain in the organization which subsequently enhances higher organizational performance (Appelbaum & Kamal, 2000; Boxal & Macky, 2009; Browning, 2006; Gyensare & Asare, 2012; Wood & Wall, 2007).

In explaining the AMO model, Marin-Garcia & Tomas (2016) further suggest that the three essential components that are required for an effective HPWPs to effects employee's discretionary effort (AMO model of performance) are as follows: A (ability) = for developing employees' skills which comprises of training and development, recruitment and selection (Choi & Yoon, 2015; Demortier et al., 2014; Drummond & Stone, 2007; Kim, Pathak, & Werner, 2015; Kroon, Van De Voorde, & Timmers, 2013; Wood, Nolte,

Burridge, Rudloff, & Green, 2015); M (motivation)= for appropriate incentives such as performance appraisal and compensation (Bello-Pintado, 2015; Boon, Belschak, Den Hartog, & Pijnenburg, 2014; Kim et al., 2015); O (opportunity) = for the opportunity to participate or employee involvement (Boselie, 2010; Jiang et al., 2012).

On the other hand, contingency theory postulates that the environment within which organization operates matters most and can also explain the moderation influence of physical working condition on the relationship between HPWPs and job performance. Contingency theory can also explain the relationship between HR practices (HPWS) (as independent variable) and performance (as dependent variable) is dependent on the effort of a third variable called contingent variable (physical working condition). Such constructs have influence on the HPWS-performance relationship (Martin-Alcazar et al, 2005).

In addition, contingency theory focuses on the assumptions behind the conceptualization of what HRM is and does. This implies that the theory reacts correctly and efficiently to the organization's environment and supports other organizational systems (contingency theory). Contingency approaches offer a lens on the promising relationship between employee inputs and creativity (which are induced by HR practices) and the performance, explicitly highlighting the significance of investigating the effect of contextual factors from the external environment (Boselie, Dietz, & Boon, 2005).

In conclusion, the contingency approach posits that the association between HR architectures (as independent variable) and performance (as the dependent variable) is dependent on the influence of a third construct called contingent variable. Such constructs have influence on the HPWPs and performance relationship (Martin-Alcázar, Romero-

Fernández, & Sánchez-Gardey, 2005). Hence, AMO model and contingency theory can also be considered relevant as supporting theories that explain the relationship among HPWPs, physical working condition and job performance. The next section presented an explanation on the theoretical framework.

2.7 Theoretical framework

The theoretical framework aimed at investigating the link between HPWPs and job performance with the moderating role of physical working condition in the Nigerian Polytechnics. The figure 2.1 shows the research framework.

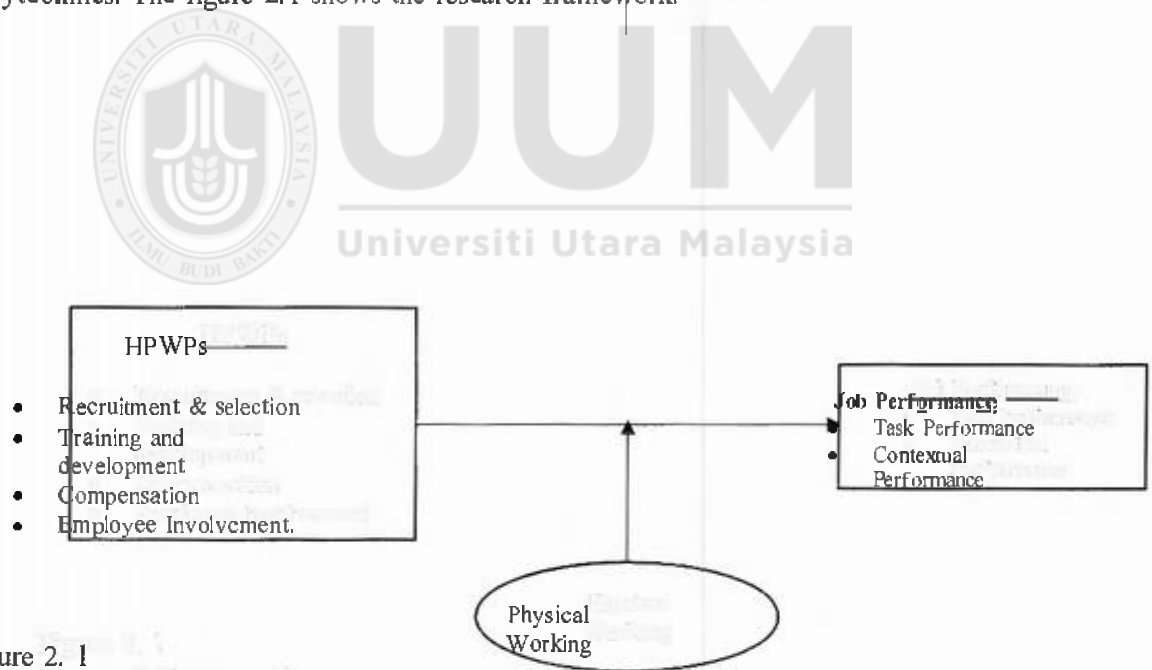


Figure 2. 1
Research Framework

2.8 Hypotheses Development

Having displayed the research framework, this section, shows correlation between the variables with the aim that developing hypotheses. This includes the relationship between

HPWPs and Job performance and the moderating effect of physical working condition was tested. Also, the hypotheses development and the findings were provided to make some suggestions and recommendations to the researchers, practitioners as well as the stakeholders.

2.8.1 Relationship between HPWPs (recruitment & selection, training & development, compensation, performance appraisal, employee involvement) and job performance.

Human resource management scholars, practitioners and professionals have revealed that performance is greatly enhanced by human resource systems that affect human capital by motivating, developing and acquiring the best talent (Posthuma et al., 2013). Also, enhanced organizational performance and organizational accomplishments are dependent upon adopting HPWPs (Choi & Lee, 2013; Demirbag, Collings, Tatoglu, & Mellahi, 2014; Fan et al., 2014; Fu, 2013; Shin & Konrad, 2017).

Consequently, some studies have shown HPWPs are related to performance. It is commonly presumed by researchers such as Godard (2004); Macky and Boxall (2007) that the success of HPWS is contingent on employee attitudes. Scholars are of different opinions regarding the effects of HPWS on employees' behaviors. Appelbaum et al. (2000) see a positive outcome for workers while others such as Godard (2004) and White, Hill, McGovern, Mills, and Smeaton (2003) do not see it that way. Hence, investigating the perception of the employee regarding the HPWS system in the organization remains indispensable.

Carpenter, Bauer, and Erdogan (2010) revealed that attainment and improved organizational performance is dependent upon HPWPs. Over the past decades, a mushrooming literature has emerged on the means in which HR practices effect positively on organizational performance. Much of the leading HPWS literature which includes; Vandenberg et al. (1999) and Appelbaum et al. (2000) have indicated that investigation of the performance effects of HPWPs is contingent upon collecting important data on both company and employees outcomes. It is also essential to note that review of the literature has proven that branch HPWS-perceived HPWS relationship attract researchers little attention. From the above discussion, this research formulated the following hypotheses based on literature review.

2.8.1.1 Relationship between Recruitment and Selection and Job Performance

According to Chabra (2005), recruitment and selection process allows the organization to employ the right person, with right knowledge, skills, and experience. It is empirically shown that recruitment and selection is an important organizational practice that encourages high productivity and greater success in organizations (Michie & Sheehan, 2005). Similarly, Fiorito et al., (2007) and Taylor et al., (2008), maintained that recruitment and selection can increase the degree of employees' commitment, and improves human capital development which would subsequently results in overall higher performance (Takeuchi et al. 2007).

Moreover, researchers suggested that through recruitment and selection, organizations can effectively win the commitment of their employees and indirectly checkmate employee behaviors (Giauque et al, 2010; Paik et al., 2007). More so, a number of

empirical studies have related job performance with recruitment and selection, among such studies; Al-Quadah et al. (2014) found a significant link between recruitment and selection and job performance in the Malaysian industries which was consistent with the study of (Kepha et al. 2014; Tabiu & Nura, 2013).

Furthermore, Saleem and Khurshid (2014) carried out a study regarding the influence of recruitment and selection on job performance in banking sector of Pakistan. And the result of the analysis indicates the existence of a strong positive link among recruitment and selection and job performance.

However, there is paucity of researches on the link between recruitment and selection and job performance among academics in Nigerian Polytechnics (Nura, 2014; Babagana, 2014; Jibrin-Bida & Abdul-Majid, 2017). Also, there is a relatively shortage collection of researches on job performance in the public sector even within the Nigeria context as there were studies in the private sector. Hence there is a need for more investigation of public sector job performance (Nura, 2014; Babagana, 2014; Jibrin-Bida & Abdul-Majid, 2017).

This perhaps pleases the key interest in the present research to study the relationship between recruitment and selection and job performance among lecturers in Nigerian Polytechnics. Though there are empirical studies on the links, but, those studies were not based on the context of Academics in Nigeria Polytechnics (Tabiu, Pangil & Othman, 2016). Thus, the researcher was interested in contributing in the area.

Apart from the above empirical evidence, social exchange theory (Blau, 1964) also provided theoretical support. The SET argued that in a social relationship the reciprocity and good gesture between two parties govern the entire relationship. In a situation

whereby, a kind gesture from one party (i.e., employer) is returned with a similar good gesture (i.e., employee through performance). Selection of potential candidates based on their KSAs is an indication to potential employees that the organization cares and valued its workforce (Takeuchi et al. 2009). Therefore, recruitment and selection of right employees will make the employees reciprocate with good performance to justify their KSAs on the job. Additionally, it has been added that recruitment affects employees' performance differently from different angles (Mokaya, Mukhweso & Njuguna, 2013).

Established on the above empirical evidence and theoretical support, the study formulated the following hypothesis.

H1a: Recruitment and selection have a significant positive effect on task performance.

H1b: Recruitment and selection have a significant positive effect on contextual performance

2.8.1.2 Relationship between Training and Development and Job Performance

Previous empirical researches that study the link between training and development and job performance have reported a positive association (Nwanzu & Okolo, 2017; Amin, Saeed, & Lodhi, 2013; Khan, Nawaz, Aleem, & Hamed, 2012; Hassan, 2016; Asfaw, Argaw, & Bayissa, 2015; Jagero, Komba, & Mlingi, 2012; Hafeez & Akbar, 2015; Sultana, Irum, Mahmood, Ahmed, & Nasir, 2012; Faiola, Osibanjo, & Ojo, 2014). For instance, Tabiu, Pangil, and Othman (2016) examined the contribution of training and development in improving the job performance in some northern Nigerian public sector organizations. In the same vein, Shem and Ngussa (2017) training and development also impact on psychological status of employees because what employees learned by observing effective mentors dictates proper behavior and action. Their study distributed

250 questionnaires and the results showed that training and development is linked to job performance.

Nevertheless, there is a shortage of research on the effect of training and development on job performance among lecturers in the Nigerian Polytechnics (Jibrin-Bida & Abdul-Majid, 2017; Ismail et al. 2018; Ismail et al. 2017; Karatepe & Olugbade, 2016). Also, there is a dearth of research on job performance in the public sector even within the Nigerian context when compared with studies in the private sector as earlier mentioned. Hence there is a need for more investigation of public sector job performance (Nura, 2014; Babagana, 2014; Jibrin-Bida & Abdul-Majid, 2017; Cqbblah & Walt, 2016).

Additionally, the above empirical evidence, the SET (Blau, 1964) also provided theoretical support. In the context of the employment relationship, when the management of an organization provides employees with adequate training and development opportunities, it sends a message to employees that the organization caters for them (Aguinis & Kurt Kraiger, 2009). Then such employees will reciprocate to perform the job in the most effective and efficient ways to the achievement of organizational aims and objectives.

From the theoretical and empirical support highlighted, this study formulates the following hypothesis.

H2a: Training and development have a significant positive effect on task performance

H2b: Training and development have a significant positive effect on contextual performance

2.8.1.3 Relationship between Compensation and Job Performance

Compensation, as one of the HPWP deals with all kind of rewards that workers obtain in the exchange for what they performed towards attaining the organizational aims and goals (John, 2003). Also, compensation packages differ for different employees depending upon their levels and kinds of formal education, training and experience (Ortín-Ángel & Salas-Fumás, 2007). Again, compensation has been measured as an important issue of concern for employees and a fundamental utility for employees to enhance their performances (Furnham, 2005; OECD, 2005).

In addition, Paulsen (2008) claimed that pay is one of the most popular ways of employees motivation to perform and ensures effective performance. Similarly, compensation is the total amount of rewards (both the financial and the nonfinancial) that organizations give employees in return for the job performed (Williams, 2008). Therefore, management and employees always view both financial and the nonfinancial rewards as motivators of performance improvement (Nadarajah, Kadiresan, Kumar, & Nissa, 2012). Also, Shahzad et al. (2008) was in the view that a good compensation scheme that consist of both financial and non-financial rewards motivate employees to show high competencies and work harder in the direction of accomplishing organizational goals and objectives. Likewise, compensation was considered as one of the critical factors that effected the performance of the employees (Vlachos, 2008).

Empirical research on the link between compensation and job performance shown that compensation positively relates with job performance (Tabiu, 2016; Rizal et al. 2014; Hassan, 2016; Quartey & Attiogbe, 2013; Subekti & Setyadi, 2016; Odunlami &

Matthew, 2014; Oluigbo & Anyiam, 2014). They supported that appropriate compensation package encourages employees towards the higher task, contextual and adaptive performance. Furthermore, Calvin (2017) studied the impact of two dimensions of compensation (salaries & wages and bonuses & incentives) on job performance in two selected institutions in Zamfara State, Nigeria.

On the other hand, there is a scarcity of research on the link between compensation and job performance among academics in Nigeria Polytechnics. Also, research on job performance in the context of the Nigerian public sector is lacking. Hence, there is a need for more research on public sector job performance (Nura, 2014; Jibrin-Bida & Abdul-Majid, 2017; Nadeem et al. 2015).

More so, SET (Blau, 1964) provided support on the relationship between compensation and job performance. The SET argued that in a social relation the reciprocity and good gesture between two parties govern the entire relationship. Therefore, in a situation whereby, a good gesture from one party (employer through HRM practices) is returned with a similar good gesture (employee through performance). In this regard, if the employee perceived that the organization provided him with appropriate compensation (both financial & non-financial), then such employee will tend to reciprocate with good performance. Hence, this theoretical and empirical evidence form the basis of the following hypothesis:

H3a: Compensation has a significant positive effect on task performance.

H3b: Compensation has a significant positive effect on contextual performance

2.8.1.4 Relationship between Performance Appraisal and Job Performance

Performance appraisal is one of the challenging HPWS/HPWP tasks for line managers to perform. Hence it is the process that appraises job performance of employees and acts on that appraisal termed "Performance Appraisal" (Dessler, 2011). Also, Grote, Bridge and Gavin (2011) argued that performance appraisal has more impact on employees work lives and careers than any other management process. Similarly, performance appraisal can both make a business more efficient and hence, maintain in keeping employees motivated. Therefore, by assessing people at regular intervals, assessments help organizations show where their employees surpass, and where the employees need to improve, and how well employees have followed the goals and objectives set by the organization. All the same, several of the scholars are in the view that better performance appraisal results in enhanced job performance.

Daoanis (2012) suggests that a performance appraisal is an essential tool that can be used in measuring frameworks set by every organization to its employees. Accordingly, performance appraisal is applied to track employees' performance and contribution against achieving the aims and goals of the organization as well as to identify employees strengths and opportunities for future improvements and assessed whether organizational aims and objectives are attained or serves as the basis for the company's future planning and development.

Performance appraisal is a vital means for evaluating employees in the organizations. Through performance appraisal, individual employee's strengths and opportunities are measured for the future improvements, and the level of organizational goals attainment is assessed to guide the organizations' future planning and development (Daoanis, 2012).

Many empirical studies have proven performance appraisal to be positively related to job performance in organizations (Ojokuku, 2013; Mir & Ahmed, 2014; Hassan, 2016; Owoyemi & George, 2013; Arabia, et. al., 2014; Kuvaa's, 2010; Singh, et. al., 2010; Daoanis, 2012). Similarly, research conducted by Akhtar et al. (2013) and Nadarasa (2013) revealed the significant positive effect of performance appraisal on job performance. However, in the research of Tiwari (2011) and Shahzad et al. (2008) have shown a negative impact between performance appraisal practices and job performance.

Hence, the present study proposed the following hypotheses:

H4a: Performance appraisal has a significant effect on task performance.

H4b: Performance appraisal has a significant positive effect on contextual performance

2.8.1.5 Relationship between employee involvement and job performance

Employee involvement can be explained as a procedure of empowering workers to participate actively in using their initiatives in making decisions and activities that are appropriate to employees' levels in organizations. Evidence from literature showed a positive relationship between employee involvement and job performance (Hassan, 2016; Ali & Rizwan, 2013; Cho & Yoon, 2009; & Nadarasa 2013). Correspondingly, Hassan (2016) investigated the impact of employee involvement on job performance in the Textile industry of Pakistan, and the results revealed that employee involvement has positive influence on job performance.

Also, the findings of Tabiu and Nura (2013) and Nadarasa (2013), supported the positive influence of employee involvement on job performance. This was in line with the research of Rizwan et al., (2013) that revealed a significant positive link between employees' involvement in job performance. Hence, there is a need for more investigation of public

sector job performance especially in the Nigerian polytechnics (Tabiu, Pangil & Othman 2016). From the above justification, the following is hypothesized:

H5a: Employee involvement has a significant positive influence on task performance.

H5b: Employee involvement has a significant positive effect on contextual performance.

2.9 Moderating Role of Physical Working Condition

One of the main concerns of organizations today is to focus on ensuring an increase in job performance. These concerns of organizations as argued by Kahya (2007) are faced with a lot of challenges especially the physical working conditions. The physical working conditions may either reduce the performance of employees by decreasing their focus on their jobs or poor quality of the job (Kahya, 2007). Also, Anitha (2014) revealed that management which employees a supportive physical working condition normally displays concern for employees' feelings and needs, encourages workers to revealed their worries to solve work-related issues, develop new skills and provides positive feedback. Therefore, a conducive work environment assists employees to be dedicated to work and increase interpersonal harmony. As evident in many previous studies, physical working condition is considered to be a robust contributing factor of job performance (Leblebici, 2012; Madan & Bajwa, 2016). Also, the investigation of Jayaweera (2015), revealed that the physical working condition is a strong determinant of job performance. This was also supported by another study which found that when employees are provided with good physical working conditions, the employees tend to have a better opportunity to perform optimally (Yassin et al., 2013b).

The physical working conditions are essential to the performance of every organization. when employees have a negative perception on physical working conditions, the employees are likely to have a stress-related sickness, abscond or be absent, their productivity and commitment will tend to decline (Brussig 2015).

The existing literature has established that favorable workplace environment guarantees employees well-being, it also enables the employees to exert themselves in the roles played with capacity that may yield higher performance (Taiwo, 2010). Also studies have shown that with improved physical working conditions resulted on positive effect on job performance and further explained that physical working condition is not just the concern of employees but a crucial factor that every employer should give priority to ensure increased job performance (Eluka & Nwonu, 2014). It is the obligations of leaders to provide good working equipment's and conducive physical working environment for increased job performance, but lack of proper job description and working materials tends to hinder performance in any organization, (Kiruja & Kabare, 2013).

Considering the positive effect of workplace environment characteristics and work motivation on job performance revealed that physical working conditions predict better when employees are motivated to the job than when they want to accomplish the target goals and outcomes of the job (Jayaweera, 2015). Similarly, Njambi (2014), explained that when extrinsic factors such as physical working conditions are the fundamentals that influence and strive employees at achieving set goals for producing high performance will have the potentials to establish a positive work environment which further inspires the level of her/his commitment to the organization and ultimately improve performance.

Therefore, physical working condition is critical to the organization and has been

continuously shown to be connected with results that are favorable. For example, existing literature has established a relationship between job performance and physical working conditions (Chandrasekar, 2011; Naharuddin, 2013). Having the good and appropriate environmental factors both psychosocial and physical will lead to increased performance (Chandrasekar, 2011). Similarly, Kahya's (2007) investigation revealed that there is an effect of physical working conditions on job performance in a manufacturing setting. Also, Aisha (2013) found that significant impact exist between physical working conditions and job performance in an Indonesian university. Equally, Jehangir, Kareem, Khan, Jan, and Soherwardi (2011) examined in their study the impact of workplace environment on employees' performance established that there is positive impact between incentives at workplace and employee's performance.

Still, the research findings of Aisha (2013) revealed a significant effect between physical working conditions and job performance. Similarly, Eluka and Nwonu (2014), posited that enhanced physical working conditions affects positively on performance of employees' which contributed to the attainment of organizational goals. Whereas, physical working conditions, job security, employee empowerment link with colleagues and relationship with supervisors are also strong contributing determinants of job performance in organizations (Shahzad, Khan, and Khan, 2014). Subsequently, a significant link was found between Human Resource Practices of working conditions, job description, internal career growth and result oriented appraisal with the performance of the employee (Nadeem, Ahmad, Ahmad, & Abdullah, 2015).

However, very little studies examined the moderating role of physical working condition and job performance. For example, a research conducted by Chen, Ploy hart, Thomas,

Anderson and Bliese (2011) has established that working conditions positively moderated the link between conscientiousness extraversion and job performance, motivation to learn and perceived training (Kim-Soon, Ahmad, & Ahmad, 2014); work stress factors and job performance (Ling & Bhatti, 2014); job stress and job performance (Khalid *et al.*, 2012); job attitude and job performance (Abubakar, 2017).

Considering the assumption of contingency theory, which indicates that the environment within which organizations operates matters most (Ismail, Abdul Majid, & Joarder, 2017). HPWPs cannot always predict enhanced performance, given that HPWPs can either be helpful or destructive because success or failure of HR practices hinge on external and internal environments (Chadwick *et al.*, 2013; Teo *et al.*, 2011). The internal and external environments in which the organization operates determine to a large extent the HR practices and policies (Schuler & MacMillan, 1984). The strategic orientations of organizations also have bearing on the application of HPWPs and effect on the organization's performance (Teo, Le Clerc, & Galang, 2011). This implies that the link between HPWPs and performance hinges on the effect of a third variable called contingent variable. Such variables have effects on the HR practices-Performance relationship (Martin-Alcazar *et al.*, 2005). In the context of this study, as indicated above, working condition is considered fit to be a moderating/contingent variable on the link between HPWPs and job performance.

Thus, this study proposed the following hypotheses:

H6a: Physical working condition moderated the relationship between recruitment and selection and task performance

H6b: Physical working condition moderated the relationship between recruitment and selection and contextual performance.

H7a: Physical working condition moderated the relationship between training and development and task performance

H7b: Physical working condition moderated the relationship between training and development and contextual performance

H8a: Physical working condition moderated the relationship between compensation and task performance

H8b: Physical working condition moderated the relationship between compensation and contextual performance

H9a: Physical working condition moderated the relationship between performance appraisal and task performance

H9b: Physical working condition moderated the relationship between performance appraisal and task performance

H10a: Physical working condition moderated the relationship between employee involvement and contextual performance

H10b: Physical Working condition moderated the relationship between employee involvement and contextual performance.

2.10 Chapter Summary

The present chapter discussed the literature review on the study variables. Also, the chapter explained the gaps in the underlying theories. Also, the section highlighted and discussed the relationship between HPWPs on job performance and possible moderating

effect of physical working condition, underpinning theory and theoretical framework was also explained in the chapter. Finally, hypotheses development was discussed in the chapter. The next chapter is research methodology.



UUM
Universiti Utara Malaysia

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The present chapter discussed the methodology and the procedures that were adopted by the study. Specifically, this chapter covered the research paradigm, research process, research design, population and sampling design, data collection procedure and how to analyze the data collected.

3.2 Research Paradigm

Bryman, (2012) described research paradigm (research philosophy) as a system that influences the technique and manner on how a research is conducted as well as the interpretations on the findings. Research paradigms have a significant role on the approach in which the research is conducted. There has been a long-standing epistemological school of thought among scientific philosophers and researchers on how research is designed. Basically, research paradigm has two schools of thought: The positivism and interpretivism (Bryman, 2012). In the literature, these two epistemological paradigms are described as follows:

Positivist paradigm: Here, the researcher intends to “predict and explain the happenings in the world through causal relationships and irregularities searching and among its constituent elements” (Burrell & Morgan, 1979). Carson, Sharkey, McIntosh, Kubena and Goodson (2010) believed that by positivists the objectivity and externality of the world

can be investigated and solve. Therefore, in ensuring the objectivity, while observing the subjects they should (researchers) remained independent, and to draw a conclusion to examine the proposed relationships they should develop hypotheses (Ikeda, 2009). Also, according to Bryant, Raphael, and Rioux (2010) positivists examine relationships based on the cause-and-effect and basic laws, and make interpretation generally of everything for the facilitation of simplistic analysis.

Because the method application related to natural science is favored by positivists to grasp social reality and beyond (Bryman, 2008), the quantitative approach and experiments were adopted by them for testing hypothetical deductive generalizations (Guo & Sheffield, 2008). Further, Baker (2000) stressed on the significance of proper procedure for data-collection, explanation and testing of the behavioral patterns. Straub, Detmar Boudreau, and Gefen (2004) emphasized that in generalizing the obtained results from a sample of a certain population, it depends on the positivist paradigm. The application of Positivism is widely recognized in management and behavioral-science research where the quantitative research method and tools which are survey and experiment which seek to establish causal relationships are applied by positivists (Brown & Brignall, 2007).

There is quite a difference between the philosophies of interpretivist paradigm and those of the positivist paradigm. The key research objectives in the interpretivist paradigm is the social phenomenon observations which are aimed at finding out the facts and truth about the reality and which tend to achieve social science-related discoveries (Burnett, 2012). The behaviors of human beings are in accordance with socially constructed values instead of causal relationships; interpretivists have the belief that human beings are

behaving according to socially constructed values rather than to causal relationships (Remenyi, Williams, Money, & Swartz, 1998).

Marshall and Rossman (1999) emphasized that for a clear understanding of social events, interpretivists are engaged in the social world they belong so as to gather experience in relation to the social reality as the participants do the same. Amaratunga, Baldry, Sarshar, and Newton (2002) added that the use of naturalistic and qualitative methods are considered by interprevists since their approach is based on the realization and explanations of a phenomenon based on its situation instead of the basic laws or external reasons. Therefore, O'hEocha, Wang, and Conboy (2012); Sarantakos (2005) stated that the framework of the interpretivist depended on the methods qualitative data collection, for instance, observations, interviews, focus groups and case studies. A conceptual research model and its fundamental hypotheses are intended to be tested in this study by relying on the approach of a survey-based quantitative research since the positivism paradigm is more suitable for this study for the achievement of the research objectives, instead of interpretivism. Table 3.1

Table 3.1

Positivist and Interpretivist approach to research Points of distinction	Positivist paradigm	Interpretivist paradigm
Fields of study	Natural sciences	Human sciences
Concepts	Structure, social and natural facts.	Meanings and social developments, learned human phenomena.
Methods	Quantitative, statistical Inference (hypothesis testing), cause and effect relationships, measurement	Qualitative, generation of hypotheses, interactions, processes
Scope	Seeks explanations for things, generalizations, laws, considers reality as being objective, tangible and unique.	Seeks to understand people, context dependent.
Researcher's role	Uninvolved observer	Actively involved
Analysis	Objective, abstract, fixed, value-free	Subjective, grounded, flexible, political

Source: Adapted from Ikeda (2009).

3.3 Research Design

In research, some scholars such as to Zikmund (2013) explained that there are three kinds of research design: experimental research, non-experimental, and historical research design. Experimental research design involves laboratory research. Non-experimental design refers to the survey that includes interviews and questionnaires and the historical research design involves using secondary data and observations.

Quantitative research approaches (i.e., non-experimental research approach) was the research approach adopted in this research. The approach was adopted to examine the link

between physical working condition, HPWPs, and job performance. Therefore, the quantitative approach allows the researchers to test links between two or more variables by using statistical methods. Partial Least Squares path modeling (Smart-PLS) was used to test the hypotheses of the research.

The design of the study adopted cross-sectional method, whereby all the data was collected at one point in time. Compared to other research design such as longitudinal studies, a cross-sectional design is cheaper, simple, and allows for the collection of data in a relatively short period (Punch, 2005; Saunders, Lewis, & Thornhill, 2009; Sekaran, & Bougie, 2010; Wilson, 2010). The quantitative approach also allows the analysis of data to be conducted by using a large sample size which can be generalized to the whole population. Also, this study used questionnaire as the primary instrument of data collection, and this is considered appropriate since it is a widely adopted tool used for data collection from a large population that cannot be observed directly (Keeter, 2005).

3.4 Population and Sample Size

3.4.1 History/Structure of Nigerian Polytechnics

According to the Decree 1979 that establishes polytechnics in Nigeria, polytechnic should adopt the following structure: where the first in the structure is the Governing Council, headed by the Chairman, charged with the administrative functions in the areas of staff development, goal setting, budget approval, general discipline, policy formulation, and liaison activities with the government. Also, at the apex of the management structure within each polytechnic is the Rector, who is the head of the polytechnic. Additionally, there is the Academic Board (AB), chaired by the Rector and the Registrar as the

Secretary. The Academic Board polices the academic activities of the Polytechnic following the general guidelines provided by the NBTE. In Nigeria, polytechnics are controlled by committee/board systems which either Governing Council or the Academic Board (AB) are responsible. Below is the structure of the Nigerian Polytechnics:

Similarly, as highlighted in figure 3.1, the highest policy-making body of Nigerian polytechnics is the Governing Council generally known as 'The council.' Therefore, the committee does not hold meeting all the time, it delegates the authority to the Rector. At the top of the hierarchy is the Rector who functions as the Chief Administrative and Academic Officer of the Polytechnic. The rector has the responsibility for the day-to-day running of the Institution and maintain the disciplinary measures among all the staff and students. Also, the rector is assisted by two Deputy Rectors for administration and academics respectively. In polytechnics, register is the head of administration whose responsibility is to assist the rector in the daily administration of the polytechnic and performing activities, such other duties as the council. Again, the rector may from time to time needed him to do. Also, registrar is the secretary to the academic board (AB), council, and any committee of the council and attends all the meetings of those bodies unless excused for a reason.

Additionally, the polytechnic functions as a collegiate system with five different colleges. Whereby each college is headed by a director who has respective heads of departments answerable to him for the effective running of the college. And the college directors report to the rector. Likewise, director works and services, the bursar and the chief librarian are all administrative heads of their respective departments, and report directly to the Rector too. (Umaru Ali Shinkafi Polytechnic Sokoto, 2018).

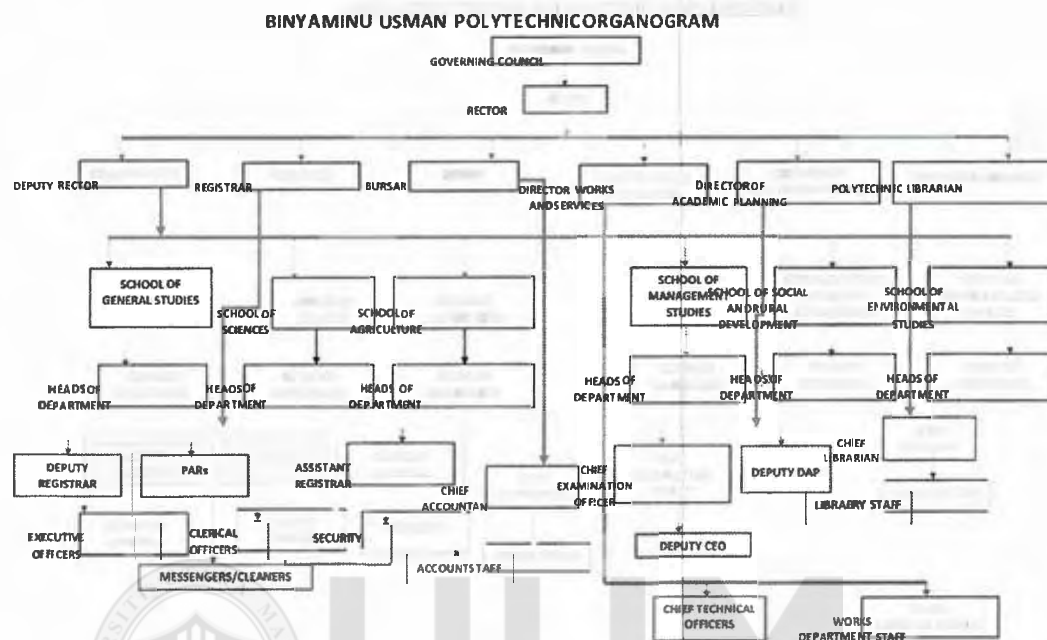


Figure 3. 1
Organogram/structure of Nigerian Polytechnics
 Source: Bilyaminu Usman Polytechnic (2016)

Similarly, according to the 1979 Decree, Polytechnics in Nigeria are mandated to produce more technicians and technologists in areas of applied sciences, technology, commerce and management that would respond to the yearnings and aspirations of the economic, agricultural and industrial development of the country. Thus, the functions of each Polytechnic shall be:

- 1) To offer part-time or full-time courses and training
 - a) In commerce and management, applied science, and technology.
 - b) To apply learning in areas of agricultural and industrial production and distribution, research and development relevant to the needs of the development of Nigeria, and adaptation of techniques as the Council may determine from time to time.

- 2) To organize seminars, conferences, workshops and study groups relative to the fields of learning.
- 3) To perform other functions as in the opinion of the Council. The above functions applied to all states and privately owned polytechnics in Nigeria.

Consequently, National Board for Technical Education [NBTE] (2017) establishes that the purpose of setting up polytechnics in Nigeria is mainly to train and produce middle-level technical manpower in courses leading to the awards of Advanced Professional Diploma, Higher National Diploma (HND), National Diploma (ND), and Certificates which are important to the needs, aspirations and the development of the nation's diverse economy and industries.

3.4.2 Population

Sekaran and Bougie (2010) defined population as the data that is drawn together in a research setting for the aim of investigating the properties of such data. Also, Creswell (2012) emphasized that population is asset of common and similar features that can be recognized and examined by the researchers. Again, according to Canava, Delahaye and Sekaran (2001) referred population to an array of interested subjects of interest which will be investigated. The population of this research was drawn from lecturers in the 12 polytechnics of seven states in the north western region of Nigeria (Kano, Kebbi, Kaduna, Jigawa, Katsina, Sokoto and Zamfara). Based on the sampling frame (the total number of the lecturers was obtained from each of the respective polytechnic registry of establishment office, see appendix). There was total number of 5,078 lecturers in all the 12 polytechnics. Lecturers were considered as essential employees and the backbone of every HEI's of learning globally. Thus, Lecturers performance can assist in encouraging

teamwork, creativity, and innovation (Asiyai, 2015; Nura & Osman, 2014). The focus was on the seven states in the North Western region of Nigeria which include, Sokoto, Katsina state, Kano state, Kaduna state, Jigawa state, Kebbi state and Zamfara states. The area was chosen because of its numerical strength and educational under development (NBS, 2013; Nura, 2014).

3.4.3 Sample Size

To determine the appropriate sample size, this study applied the use of Krejcie and Morgan's (1970) sample size determination benchmarks, given the fact that it is one of the sample technique used in calculating sample size and population of respondents. Also, the table is able to reduce sampling errors, provided an easier means of achieving a good sample size using a given formula and a comprehensive table regarding a definite population figure (level of confidence and precision is being taken care of). Hence, the stress of calculation is relieved of researchers.

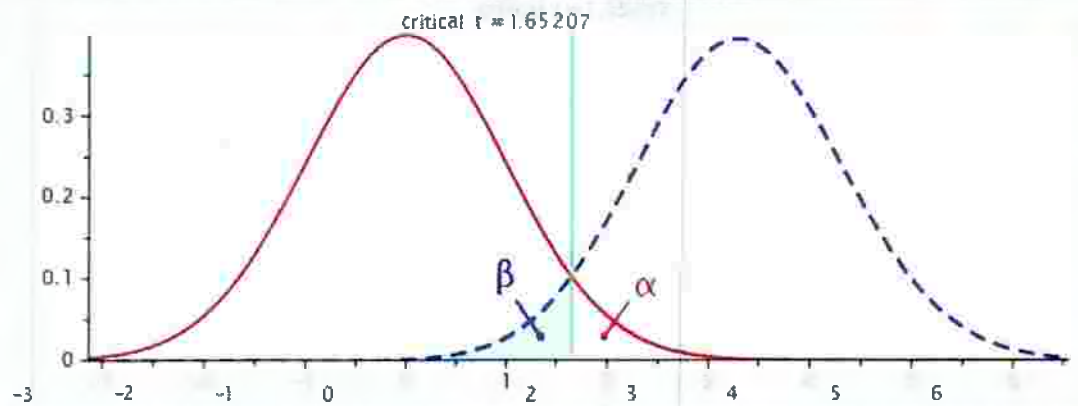
Different researchers have come up with different methods of determining appropriate sample size. In the first place, power of statistical test will be considered. Power of statistical test refers to a process through which sample size should be determined. Power of statistical test is regarded a possibility that null hypotheses would not be accepted as it is really not a truth or a possibility of not accepting a particular effect size of a certain sample size at a certain alpha level (Cohen, 1988, 1992; Faul, Erdfelder, Lang, & Buchner, 2007). Further, scholars are agreed on the fact that larger sample size results in greater power of a statistical test (Borenstein, Rothstein, & Cohen, 2001; Kelley & Maxwell, 2003; Snijders, 2005).

Power analysis is the statistical tool for the identification of correct sample size for research. A priori power analysis, in this study, is carried out via G*Power 3.1.2.9 software (Faul, Erdfelder, Buchner, & Lang, 2009; Faul et al., 2007). To conduct the test, certain parameters are involved based on the recommendation of Cohen (1977). These are: Power ($1-\beta$ err prob; 0.95), an alpha significance level (α err prob; 0.05), medium effect size f^2 (0.15) and three predictors of dependent variable which are HPWPs, physical working condition, and job performance.



UUM
Universiti Utara Malaysia

Central and noncentral distributions Protocol of power analyse



Test family		Statistical test	
ttests		Linear multiple regression, fixed model, single regression coefficient	
Type of power analysis			
A priori: Compute required sample size - given α , power, and effect size			
Input Parameters		Output Parameters	
Tail(s)	One	Noncentrality parameter δ	3.3015148
(Determine=>) Effect size f^2	0.05	Critical t	1.6520729
α err prob	0.05	Dr	212
Power (1- β err prob)	0.95	Total sample size	218
Number of predictors	5	Actual power	0.9501283

X-Ypb for range of values

Calculate

Figure 3.2
The Output of a Priori Power Analysis

From the figure 3.2 above, it is evident that 218 sample-size was determined by the test to be appropriate for a multiple regression based statistical analysis of this study. However, the calculated sample size of 218 for such large Nigerian polytechnics population appears to be insufficient. Therefore, it is deemed relevant to try a different method for sample size determination.

Considered next is the Krejcie and Morgan's (1970) study on sample size determination. As mentioned earlier, Based on the computation of sample size table by Krejcie and Morgan (1970), for the present research sample size was 361 from the population of 5,078 in 12 North West Region Polytechnics in Nigeria. However, to address the issues associated with poor response rate, non-cooperative subjects, and non-response bias, scholars such as Barlett, Kotrlik, & Higgins, (2001) suggested an increase of certain percentage on the sample size. Some researchers' suggested that doubling the size of the sample can reduce the sampling error and can take care of low response rate issue (Hair, Wolfinbarger, Ortinau & Bush, 2016; 2008). Nevertheless, the size of the sample was multiplied by two to minimize error in sampling and to take care of low response rate issue (Hair, Wolfinbarger, Ortinau & Bush, 2016; 2008).

Based on the above suggestions, this study increased the initial sample size by 100%. Therefore, instead of 361 questionnaires, the study used 722 as the sample size. Thus, going by this increase, the study distributed 722 questionnaires. This is because response rate in Nigeria is very poor due to what scholars attribute to a number of environmental related factors (Raimi & Adebakin, 2013). Therefore, table 3.1 displays the total sample size of 722 drawn from the selected North Western.

Table 3. 2

Population and Sample Size of the Study

S/N o	State	Name of Polytechnic	Population (Lecturers)	(%) of Population	Sample Size	Samples as % of the population	Samples increased by 100%
1.	Jigawa	Hussaini Adamu Federal Polytechnic, Kazaure.	211	4	361	14	28
2.		Jigawa state Polytechnic, Dutse.	127	2		7	14
3.		Binyaminu Usman Polytechnic, Hadejia.	89	2		7	14
4.	Kaduna	Nuhu Bamalli Zaria polytechnic	596	12		43	86
5.		Kaduna Federal Polytechnic	1656	33		119	238
6.	Kano	Kano state polytechnic	576	11		40	80
7.	Katsina	Hassan Usman Katsina state polytechnic	370	7		25	50
8.	Kebbi	Kebbi state Polytechnic, Dakin Gari	54		1	5	10
9.		Umaru Waziri Federal Polytechnic	503	10		36	72
10.	Sokoto	Umaru Ali Shinkafi Polytechnic	317	6		22	44
11.	Zamfara	Federal Polytechnic Kaura Namoda	435	9		32	64
12.		Abdu Gusau Mafara polytechnic	144	3		11	22
TOTAL			5 078	100	361	361	722

Source: See Appendix

3.4.4 Sampling Techniques

According to Sekaran and Bougie (2010) random sampling technique aims to allow every object of the populace to have an equal chance of being chosen. It is also useful in neutralizing researcher's bias regarding the selection of sample objects Salkind (2003), and enhancement of high generalizability of the findings (Cavana, Delahaye & Sekaran, 2001). The present study adopted a proportionate stratified sampling technique. Also, scholars such as Sekaran and Bougie (2013) and Wilson (2010) explained stratified sampling simply as a technique of sampling whereby the researcher will divide the entire population of the study into different stratum and then randomly select a subject from each stratum. Therefore, considering that the population of the study comprises of lecturers from 12 different polytechnics in seven states, stratified sampling is regarded as the best technique to ensure that all the lecturers in the 12 polytechnics are fully represented. More so, Sekaran and Bougie (2013) and Wilson (2010) posited that adoption of stratified sampling minimizes the sampling errors. Because each of the strata used in this study has different population size this procedure is used so that the size of each stratum is proportionate to the population size of the strata when examined across the entire population. This means that each stratum has the same sampling fraction.

3.4.5 Unit of Analysis

According to Creswell (2012) and Kumar, Abdul Talib and Ramayah (2013) stated that there are three types of units of analysis that are commonly used for researches in the social science research domain, such as: individual, organizations and group units of analysis. The present research aimed at examining the impact of HPWPs on Nigerian lecturers' job performance with the moderating role of physical working condition in

order to offer HRM-based solution the performance-related problems confronting Nigerian polytechnics lecturers' performance. The information concerning the subject matter was drawn from the lecturers' of the selected Nigerian polytechnics. Thus, the unit of analysis for this study was individual. This means that the lecturers' of sampled Nigerian polytechnics were the respondents of the study that comprised of lecturers in the 12 polytechnics of seven states in the north western region of Nigeria (Kano, Kebbi, Kaduna, Jigawa, Katsina, Sokoto and Zamfara).

3.5 Measurement of the Variables

This section presented the fitting, validated and recommended measures from the previous literature for the variables of the present study. The dependent variable, independent variable, and the moderating variable are measured which were either adapted or adopted from prior research. The entire survey contains a total number of 68 scaled items that were adapted to measure the constructs that are under study. This was shown in table 3.2 below:

Table 3. 3

Total of Scale Items Used in this study

S/N	Variable	Components	No.of Items	Reliability Value (Cronbach alpha α)	Sources/Adapted
1.	Job performance	Task performance	11	0.96	Tsui et al., (1997); Motowidlo and Van Scotter (1994).
		Contextual performance	16	0.95	
2	HPWPs	Recruitment & Selection	6	0.84	Demo et al., (2012)
		Training & Development	6	0.88	
		Compensation	5	0.86	
		Employee involvement	12	0.93	
		Performance appraisal	5	0.91	
3.	Physical working condition		7	0.93	Uline and Tschannen-Moran (2008)

The following subsections entail the operationalization of the variables mentioned above.

3.5.1 Job Performance

In this research, Job Performance was measured by contextual and task performance. This is in consistent with Borman and Motowidlo (1993b) view on job performance. Therefore, in measuring job performance, the items were adapted and measured by both contextual and task performance. Task Performance can be seen “as behaviors of employees about the efficiency, quantity, and quality of the core activities that an employee is allocated to perform in the organization.” Task performance was measured by 11 items adapted from Tsui, Pearce, and Tripoli (1997), while, Contextual performance refers to efforts (action and behaviors) of employees that are outside their job description but yet improves the

efficiency of the organization. The contextual performance was measured with 16 items that was adapted from (Motowidlo & Van Scotter, 1994).

Also, task performance scale has a very strong, valid and reliable Cronbach Alpha 0.96 (Tsui et al, 1997), and covers all the components of job performance. These items have been tested by previous studies and revealed valid and reliable internal consistency such as Rahman, Ferdausy, and Karan (2012) with Cronbach alpha 0.89, Uddin *et al*, 2014 with Cronbach alpha 0.89. Rahman, Ferdausy, and Karan (2015) with Cronbach alpha 0.78, Rahman, Ferdausy, and Karan (2013) with Cronbach alpha 0.89 and Tabiu *et al*. (2016) with Cronbach alpha 0.86.

Again, the contextual performance scale has been reported to have excellent internal consistency with Cronbach alpha of 0.95 (Motowidlo & Van Scotter, 1994). Some researchers have used these items for measuring contextual performance, Jayaweera (2015) recorded Cronbach alpha of 0.94, Pradhan and Pradhan (2015) Cronbach alpha 0.90, Akgunduz (2015) Cronbach alpha 0.91 and Hernaus and Mikulic (2014) with Cronbach alpha 0.87. The variable were measured in this study by the following items:

Table 3. 4
Job Performance (27 items)

Operational Definitions	1. OOriginal Items	2. AAdapted Items
Task Performance: refers to "as behaviors of employees about the efficiency, quantity, and quality of the core activities that an employee	1. Employee's quantity of work is higher than average. 2. The quality of work is much higher than average. 3. The employee's efficiency is much higher than average. 4. Employee's standards of work quality are higher than the formal standards for this job.	1. My quantity of work is higher than average. 22. My quality of work is much higher than average. 33. My efficiency is much higher than average. 44. My standard of work quality is higher than the formal standard of this job.

is allocated to perform in the organization.” (Tsui, Pearce & Tripoli 1997)

5. Employee strives for higher quality work than required.
6. Employee upholds highest professional standards.
7. Employee's ability to perform core job tasks.
8. Employee's judgment when performing core job tasks.
9. Employee's accuracy when performing core job tasks.
10. Employee's job knowledge with reference to core job tasks.
11. Employee's creativity when performing core.

55. I strive for higher quality of work than required.
6. I uphold the highest professional standard.
7. I can perform core job tasks.
8. I judge when performing core job tasks.
9. I accurately perform core job task.
10. My job knowledge is concerning core job tasks.
11. I use creativity when performing my core tasks

Contextual Performance: refers the efforts (action and behaviors) of employees that are outside their job description but yet improves organizational efficiency (Motowidlo & Scotter 1994).

12. Comply with instructions even when supervisors are not present;
13. Cooperate with others in the team;
14. Persist in overcoming obstacles to complete a task;
15. Display proper military appearance and bearing;
16. Volunteer for additional duty;
17. Follow proper procedures and avoid unauthorized shortcuts;
18. Look for a challenging assignment;
19. Offer to help others accomplish their work;
20. Pay close attention to important details;
21. Defend the supervisor's decisions;
22. Render proper military courtesy;
23. Support and encourage a coworker with a problem;
24. Take the initiative to solve a work problem;
25. Exercise personal discipline and self-control;
26. Tackle a difficult work assignment enthusiastically;
27. Voluntarily do more than the job requires to help others or contribute to unit effectiveness?

12. I comply with instructions even when head of department is not present
13. I cooperate with others in the team
14. I persist to overcome obstacles to complete a lecturing task.
15. I display proper appearance and bearing
16. I volunteer for additional duty
17. I follow proper procedures and avoid unauthorized shortcuts.
18. I look for challenging assignment.
19. I offer to help others accomplish their work.
20. I pay close attention to important details
21. I defend the head of department's decisions.
22. I render proper teaching courtesy.
23. I support and encourage a colleague with a problem.
24. I take the initiative to solve a work problem.
25. I exercise personal discipline and self-control.

		26. I tackle a difficult work assignment enthusiastically. 27. I voluntarily do more than the job requires to help others or contributes to organizational effectiveness
--	--	---

Source: Motowidlo and Scotter (1994) and Tsui, Pearce, and Tripoli (1997)

3.5.2 HPWPs

HPWPs refers to HR practices selected to increase employees' skills, performance appraisal, compensation and employee involvement in such a way that creates synergistic effects where particular practices influence one another to enhance effectiveness and efficiency and in organizations, as well as employees, become a source of viable competitive advantage (Demo, Neiva, Nunes, & Rozzett, 2012).

Table 3. 5
HPWPs (34 items)

Operational Definitions	Original Items	Adapted Items
Training refers to as providing for employees' systematic competence acquisition and to stimulate continuous learning and knowledge production (Bohlander & Snell 2009; Borges-Andrade, Abbad & Mourão, 2006; Dessler, 2002; Dutra, 2001; Truss, Mankin, & Kellither, 2012).	1. I can use knowledge and behaviors learned in training at work. 2. The organization I work for helps me develop the skills I need for the successful accomplishment of my duties (e.g., training, conferences, etc.). 3. The organization I work for invests in my development and education promoting my personal and professional growth in a broad manner (e.g., full or partial sponsorship of undergraduate degrees, postgraduate programs, language courses, etc.).	1. I can use knowledge and behaviors learned in training at work. 2. My polytechnic helps me develop the skills I need for the successful accomplishment of my duties (e.g., training, conferences, etc.). 3. My polytechnic invests in my development and education promoting my personal and professional growth in a broad manner (e.g., full or partial sponsorship of undergraduate degrees, postgraduate programs, language courses, etc.). 4. In my polytechnic, training is evaluated by participants.

Employee Involvement represents an organizationally expressed proposal, with practical and theoretical constructions, to have an effective connection and contribution with the employee's well-being at work, regarding relationship, acknowledgment, participation, and communication (Demo et al., (2012).

4. In the organization where I work, training is evaluated by participants.
5. The organization I work for stimulates learning and application of knowledge.
6. In the organization where I work, training needs are identified periodically.

5. My polytechnic stimulates learning and application of knowledge.
6. In my polytechnic, training needs are identified periodically.

7. The organization I work for treats me with respect and attention.
8. The organization I work for is concerned with my well-being.
9. In the organization where I work, there is an environment of understanding and confidence between managers and employees.
10. The organization I work for recognizes the work I do and the results I achieve (e.g., in oral compliments, in articles in corporate bulletins, etc.).
11. The organization I work for favors autonomy in doing tasks and making decisions.
12. The organization I work for seeks to meet my needs and professional expectations.
13. In the organization where I work, employees and their managers enjoy constant exchange of information in order to perform their duties properly.
14. The organization I work for encourages my

7. My polytechnic treats me with respect and attention.
8. My polytechnic is concerned with my well-being.
9. In my polytechnic, there is an environment of understanding and confidence between managers and employees.
10. My polytechnic recognizes the work I do and the results I achieve (e.g., in oral compliments, in articles in corporate bulletins, etc.).
11. My polytechnic favors autonomy in doing tasks and making decisions.
12. My polytechnic seeks to meet my needs and professional expectations.
13. In my polytechnic lecturers and their head of departments enjoy constant exchange of information in order to perform their duties properly.
14. My polytechnic encourages my participation in decision-making and problem-solving.
15. In my polytechnic, there is an environment of

participation in decision-making and problem-solving.

15. In the organization where I work, there is an environment of trust and cooperation among colleagues.

16. The organization I work for encourages interaction among its employees (e.g., social gatherings, social events, sports events, etc.).

17. The organization I work for follows up on the adaptation of employees to their functions.

18. In the organization where I work, there is a consistency between discourse and management practice.

19. The organization I work for discusses competency-based performance appraisal criteria and results with its employees.

20. In the organization where I work, competency-based performance appraisal provides the basis for an employee development plan.

21. In the organization where I work, competency-based performance appraisal is the basis for decisions about promotions and salary increases.

22. The organization I work for disseminates competency-based performance appraisal

trust and cooperation among colleagues.

16. My polytechnic encourages interaction among its lecturers (e.g., social gatherings, social events, sports events, etc.).

17. My polytechnic follows up on the adaptation of lecturers to their functions.

18. In my polytechnic, there is a consistency between discourse and management practice.

19. My polytechnic discusses competency-based performance appraisal criteria and results with its lecturers.

20. In my polytechnic, competency-based performance appraisal provides the basis for lecturers' development plan.

21. In my polytechnic, competency-based performance appraisal is the basis for decisions about promotions and salary increase.

22. My polytechnic disseminates competency-based performance appraisal criteria and results to its lecturers.

23. My polytechnic periodically conducts

Performance appraisal means an assessment of employee's competence and performance, supporting decisions about their career planning, development and promotions (Bohlander & Snell, 2009; Dessler, 2002; Devanna, Fombrun & Tichy, 1984; Dutra, 2000).



Compensation refers to rewarding of employee's performance and competence through incentives and remunerations (Bohlander & Snell, 2009; Dessler, 2002; Devanna et al., 1984; Dutra, 2001; Gerhart, 2010).



Recruitment & Selection can be seen as searching for employees, encourage them to apply, and select them, aiming to harmonize people's values, interests, expectations and competences with the characteristics and demands of the position and the organization, while, selection, according to involves an act of

criteria and results to its employees.

23. The organization I work for periodically conducts competency-based performance appraisals.

24. In the organization where I work, I get incentives such as promotions, commissioned functions, awards, bonuses, etc.

25. In the organization where I work, my salary is influenced by my results.

26. The organization I work for offers me a salary that is compatible with my skills, training, and education.

27. The organization I work for remunerates me according to the remuneration offered at either the public or private marketplace levels.

28. The organization I work for considers the expectations and suggestions of its employees when designing a system of employee rewards.

29. The organization I work for widely disseminates information about both external and internal recruitment processes.

30. The organization I work for discloses information to applicants regarding the steps and criteria of the selection process.

competency-based performance appraisals.

24. In my polytechnic I get incentives such as promotions, commissioned functions, awards, bonuses, etc.

25. In my polytechnic, my salary is influenced by my results.

26. My polytechnic offers me a salary that is compatible with my skills, training, and education.

27. My polytechnic remunerates me according to the remuneration offered at either the public or private marketplace levels.

28. My polytechnic considers the expectations and suggestions of its lecturers when designing a system of lecturer's rewards.

29. In my polytechnic information is disseminates about both external and internal recruitment processes.

30. In my polytechnic information is disclosed to applicants regarding the steps and criteria of the selection process.

31. In my polytechnic performance results is communicated to

decreasing the number and selecting from among those job applicants who have the pertinent qualifications (Armstrong, 2009; Bohlander & Snell, 2007; Bohlander & Snell, 2009; Dessler, 2002; Lievens & Chapman, 2010).

31. The organization I work for communicates performance results to candidates at the end of the selection process.
 32. Selection tests of the organization where I work are conducted by trained and impartial people.
 33. The organization I work for has competitive selection processes that attract competent people.
 34. The organization I work for uses various selection instruments (e.g. interviews, tests, etc.).

candidates at the end of the selection process.

32. In my polytechnic, selection tests are conducted by trained and impartial people.

33. In my polytechnic, there are competitive selection processes that attract competent people.

34. In my polytechnic, various selection instruments (e.g., interviews, tests, etc.) are used.

Sources: Demo, Neiva, Nunes and Rozzett (2012).

3.5.3 Physical Working Condition

Physical working condition in this study was conceptualized in relation to the organization's environment's physical conditions (Uline & Tschannen-Moran, 2008). The study adapted physical working conditions measurement developed by Uline and Tschannen-Moran (2008). The measurement consists of seven-items, and it achieved an acceptable reliability Cronbach alpha of 0.93. Hence, the scale has been considered more appropriate and has been selected for this study. Also, the scale has been chosen for consistency reason and previous studies have established its reliability and validity. It is also connected to the context of this research. The research will use 5-point Likert scales 1= strongly disagree, and 5= strongly agree.

Table 3.6

Physical Working condition (7 items)

Operational Definitions	Original Items	Adapted Items
Physical working condition refers to the school's physical structure for teaching and learning that provide adequacy of space, human comfort, pleasing appearance, functional furniture and equipment, clean and orderly environment and regular maintenance that effects occupants', sense of well-being as well as their capacity to teach and learn (Uline & Tschannen-Moran 2008).	<ol style="list-style-type: none"> 1. The facilities here are adequate to support learning 2. The building is a comfortable place to be 3 This building is pleasing in appearance 4. There is adequate space for teaching and learning here 5. Classroom equipment and furniture are in disrepair* 6. The facilities here are lacking in regular maintenance * 7. This building is neat and clean 	<ol style="list-style-type: none"> 1. In my polytechnic the facilities are adequate. 2. In my polytechnic the building is a comfortable place to be. 3. In my polytechnic the building is pleasing in appearance. 4. In my polytechnic there is adequate space for academic activities 5. In my polytechnic classrooms equipment and furniture are in order. 6. In my polytechnic the facilities are regularly maintained. 7. In my polytechnic the building is neat and clean

Source: Uline and Tschannen-Moran (2008).

3.5.4 Demographic Variable

In this research, demography comprised of demographic data or information about the respondents and the polytechnics to which they belong, and these involved age, marital status, gender and highest educational level, level of position and year of service in current Polytechnic of the respondents. The demographic profile of the respondents was measured in the following way:

Table 3.7

Demographic Variables

Demographic Information	
1. Name of school.....	
2. Age (a) 20-25 (b) 26-30 (c) 31-35 (d) 36-40 (e) 40 and Above	
3. Marital status (a) Single (b) Married (c) Others	
4. Gender (a) Male (b) Female	
5. Highest educational level (a) HND/ Degree (b) PGD/ Master (c) PhD (d) Others(specify _____)	
6. Level of position (a) Lecturer III (b) Lecturer II (c) Lecturer I (d) Senior Lecturer (e) Principal Lecturer (f) Chief Lecturer	
7. Year of service in current polytechnic (a) 2-5 years, (b) 6-10 years (c) 11-15 years (d) 16-20 years (e) 21-25 years (f) 26 years and Above.	

3.6 Instrumentation

Questionnaire structure as pointed out by Gupta (2006), represents detail precautions undertaken to achieve validity of the responses from the respondents. It also ensures an act of protecting the privacy of respondents and separating items according to constructs for the respondents to understand. More so, this study designed the questionnaire in English language which is the official language of the respondents. Thus, the study used a structured questionnaire consisting of close-ended multiple choice questions. Although several studies in literature applied seven, six and four point's Likert scale, therefore, the current study the operationalization of construct was carried out using a five-point Likert scale. The scale for all the constructs ranged from 1 (strongly disagree) to 5 (strongly agree). This was because scholars have maintained that applying scale with mid-point offers better and accurate research outcomes (Krosnick, & Fabrigar, 1997). As well as enabling individuals to indicate their opinion precisely. Moreover, Chen, Lee, and Stevenson (1995) and Presser, (1981) affirm that scale with a midpoint gives wider chance

for individuals to show their stand (Elmore, & Beggs, 1975). Hence, Rosano, Newman, Katz, and Hirsch, (2008) argued that the midpoint scale is most appropriate which further indicates that five points Likert scale can produce good results.

The questionnaire for the current research was separated into four sections; Section A asked questions on the job performance, Section B inquired about HPWPs. Also, Section C asked questions on physical working condition; Finally, section D captured the respondent profile.

3.7 Content and Face Validity

Content validity is considered important before distribution out of questionnaire to the potential respondents. Because it aimed at ensuring the dimensions and the indicators, that make up the variables of the study to be accurately and precisely responsible for their job.

Meaning that content validity make sure that the dimensions and items of an exact construct measure such construct with the greatest adequacy and representativeness.

Therefore, to determine the reliability and validity of the instrument in ensuring to have the greatest representativeness and adequacy of the variables of this research, the questionnaire was subjected to some transition processes: the researcher conducted a pretest (i.e. content validity) by given academicians (experts) from UUM College of Business and two expert from the university in Nigeria, in such a way that their opinions, suggestions and observations were sought in respect of the representativeness and suitability of the constructs' measurement, as recommended by Sekaran (2003) and Hair et al. (2010). Also, they were asked to check out for underrepresentation or duplication of

measures. Consequently, based on their recommendations, the questionnaire was reproduced and distributed.

3.8 Pilot Study

The pilot study refers to gauging the goodness of the measure to guarantee its consistency and dependability and thus establish the validity and reliability of measures before distributing the final questionnaire (Sekaran & Bougie, 2010; Zikmund et al., 2010).

It is necessary to conduct pilot study before data collection for the main study. Therefore, pilot survey was conducted to ascertain the internal reliability of the measures. Cronbach's alpha method is the commonly-used reliability testing method which indicates the internal consistency and reliability of the survey in the social science kingdom. Scholars such as Sekaran (2003) emphasized that the closer the consistency coefficient is to 1.00, the stronger the consistency and reliability of the survey. And, if the value of Cronbach's alpha is 0.6, it is detected to be acceptable but poor.

Pilot study is generally conducted on small sample of respondents in which the result of the test will help the researcher to ascertain the ambiguous items and remove them before carrying out the main data collection. In line with the arguments of scholars such as López-Gamero, Molina-Azorin and Claver-Cortés (2000) and Plaza-Ubeda *et al.*, (2010), who recommended that the range of questionnaires for pilot test is to be within 15-30 for potential respondents to complete responses. Though, according to Connelley (2008), the sample of pilot study should be 10 per cent of the study sample projected for larger parent study. But, some scholars such as Isaac and Michael (1995) and Hill (1998) recommended

10 to 30 participants for pilots test in survey research; again, Julious (2005) and Belle and Millard (2011) in the medical fieldsuggested 12 participants. Also, Cooper and Schindler (2009) suggested that the appropriate sample size for the pilot study can fall between the range of 25 respondents and 100 respondents.

In this study, the method involved in for the conduct of pilot study began with face and content validity as suggested by (Sekaran, 2003; Hair et al. 2010). The pilot study was carried out by administering 50 questionnaires to respondents among the polytechnics academicians in October, 2018 to examine the reliability of the measurement. Even though most of the items in the questionnaires had been adapted from a well-known instrument, but a pilot test was still necessary. And all the items were written in English as it is the official language of the respondents. It is also essential to note that polytechnic lecturers involved in the pilot study were not involved in the actual study.

The choice of 50 sample was in accordance with the fact that the larger the sample size, the stronger is the results. Additionally, sampling part of the sampled respondents of the study is underpinned by the declaration of Pallant (2011) which recommends that pilot test should be carried out on the same type of people that will be used in the main study to make sure that instructions, questions and scale items are clear. The process of pilot study was ended with the confirmation of the Cronbach's alpha through PLS path modelling (Wold, 1974, 1985) by using Smart PLS-SEM 3.0 software (Ringle, Wende, & Will, 2005).

The Cronbach's alpha from the pilot study was more than 0.60 as a result no item was deleted. All items were well understood by the respondents. The summary of the result of the pilot survey is showed in the table 3.7 below:

Table 3. 7

Pilot Study: reliability (N=50)

S/No	Constructs	Number of Items	Cronbach's Alpha
1.	Task Performance	11	0.763
2.	Contextual Performance	16	0.848
3.	Recruitment & Selection	6	0.808
4.	Training and Development	6	0.664
5.	Employee Involvement	12	0.913
6.	Performance Appraisal	5	0.841
7.	Compensation	5	0.727
8.	Physical Working Condition	7	0.836

Source: The Researcher

Table 3.7 above showed Cronbach's alpha of each latent construct ranged from 0.664 to 0.913, each attained higher reliability coefficient of more than 0.70 except training and development which had 0.664. Consequently, all the study variables are reliable at 0.60 as suggested by (Sekaran & Bougie, 2010).

3.11 Data Collection Procedure

The samples for the present research were lecturers in the 12 polytechnics in North-Western Nigeria. After the proposal defense, the printed and produced questionnaires were administered through the help of various affected HOD's and the entire exercise took place for a period of three months (October, 2018-January, 2019). 722 potential respondents were sampled, and questionnaires were distributed to them. As part of protocol, an official letter was collected from the Othman Yeop Graduate School of Business (OYAGSB). In closed in the letter stated the introduction of the researcher as well as the purpose of conducting the research. The letter was meant to ease data collection by improving and soliciting the support of the potential respondents for the research.

The survey was conducted through self-administered questionnaires. The major advantage of self-administered questionnaire is that the researcher can collect all the completed response within a short period of time. Specifically, full-scale data collection started from the fourth week of October, 2018 and ended in the fourth week of January, 2019. As stated earlier, questionnaire was the method used to collect data for this study and was administered to the 12 polytechnics lecturers in the North West Regional of Nigeria through self-administration.

The process started with consulting the registrar establishment of each polytechnic physically and obtained the population of all lecturers in each concerned polytechnic for sampling. After taking the appropriate sampling of lecturers in each polytechnics. Subsequently, approval was obtained, the total number of 722 questionnaires were distributed to the lecturers by the researcher together with the help of their respective HOD's. The number of questionnaires distributed in each polytechnic was based on the proportionate stratified sampling method. Thus, the respondents in each polytechnic were given two weeks to answer and submit the filled questionnaires.

The researcher made arrangements to collect the questionnaires from the lecturers through the assigned HODs in each effected departments about two weeks after the date of the first visit. The researcher made many phone calls to the HODs before going for the second official visit. The researcher informed the assigned HODs and everyone involved through phone calls about the second visit in order to collect all the questionnaires distributed two weeks ago.

However, there were cases when some questionnaires were not ready for collection after two weeks. In some polytechnics the delay in data collection took more than a month.

Though, after about two months with frequent follow-up in some polytechnics, the total number of 546 (75.6%) questionnaire was received.

3.10 Data Analysis Techniques

This research used both SPSS software version 22 and Partial Least Square-Structural Equation Modelling (Smart PLS-SEM 3.0) which is the second generation multivariate technique that can simultaneously evaluate the measurement model (the links between variables and their corresponding indicators) Hairs et al, (2014). The SPSS software version 22 was used for preliminary analysis, which comprises of data cleaning (identification and replacement of missing values and treatment of outliers), descriptive statistics (respondent profile and mean and standard deviation) as well as normality and multi-collinearity analysis to satisfy the assumptions of regression analysis.

Also, Smart PLS-SEM was used by the study and established the reliability and validity of research constructs as well as hypotheses testing and determined cause-and-effect link between the variables. Hence, according to Hair et al., (2014), PLS-SEM is the second generation techniques of data analysis and has been specifically developed to overcome the weaknesses associated with the use of first-generation techniques. Equally, the PLS-SEM analysis technique was chosen because of its flexibility and efficiency in analyzing small sample size and complex models (Bagozzi & Yi, 2012). Also, PLS-SEM was chosen because it estimate the path relationships in the model with minimal error terms (i.e., residual variance) of the endogenous constructs (Hair et al., 2014). Equally, PLS-SEM was chosen because it can measure both the structural and measurement models and can simply handle formative and reflective measurement models, and single items,

construct without identification problem. Likewise, the software has been employed in a wide range of research situations.

Thus, PLS-SEM was used in assessing the measurement model which include determination of reliability and validity of constructs and many tests such as the examining of internal consistency of instruments and outer loadings (composite reliability and Cronbach alpha) and average variance extracted (AVE), this indicates the variance that a variable captured from its indicators relative to the amount due to the measurement error (Hair *et al.*, 2014).

Furthermore, PLS-SEM was used in assessing the structural model which entails a standard bootstrapping procedure that needs to be followed, to determine path coefficient (cause-and-effect relationship), R^2 predictive relevance and effect size (Hair *et al.*, 2014; Henseler, Ringle, & Sinkovics, 2009; Roldán & Sánchez-Franco, 2012). Moreover, the literature shows that Smart PLS has some advantages over other related SEM, like AMOS and LISREL that are covariance-based. Hence, PLS-SEM is a component-based approach with an algorithm that minimizes the variance of all the dependent variables instead of explaining the covariance (Roldán & Sánchez-Franco, 2012).

3.11 Chapter Summary

The present chapter presented and discussed the methodology carried out in the research. The section also discussed the measurement, population, sampling, data collection procedures and techniques of data analysis. The study was cross sectional in nature and the unit of analysis was lecturers' in the 12 polytechnics of North-western Nigerian region. Also, the adopted sampling technique was proportionate stratified random

sampling technique consisted 722 potential respondents were sampled. The measurement scale for the variables of the study were adapted from the extant study and pilot was considered essential to be carried out to assured the measures were internally consistent and able to achieve their presumed roles. The analysis technique comprised of descriptive analysis and inferential analysis through SPSS version 25 and Smart PLS 3.0 software respectively. The subsequent chapter, which is the fourth chapter of this study, offered the descriptive analysis of the potential respondents for this research, inferential analysis, empirical results, key findings and the test of hypotheses of the research.



UUM
Universiti Utara Malaysia

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

4.1 Introduction

The present chapter dealt with the data analysis, interpretation, report of data collected and results from the respondents. Analysis of data was carried out using Statistical Package for Social Sciences (SPSS) version 25 and Partial Least Square Structural Equation Model (PLS-SEM) 3; SPSS was used in capturing, coding and screening the data with a view to making it acceptable for further analysis by PLS. This chapter is divided into two; with each category having sections and subsections. The first section discusses the areas of analysis carried out using SPSS. This includes response rate, data screening and preliminary analysis, non-response bias, normality test, missing value analysis, multicollinearity test, common method bias/variance test, and the demographic profile of the respondents.

Moreover, the second section explains the areas of analysis done using PLS-SEM software. This includes measurement model evaluation which explains the validity and reliability of the exogenous items. Also, the section comprises the structural model evaluation involving estimation of path coefficient of the variables, predictive relevance (Q^2) and variance, effect size (f^2). Lastly, the moderating effect of physical working condition in the structural model was discussed. And the chapter concluded with the summary of hypotheses results. Discussions on the rate of responses in this study were first to begin with.

4.2 Response Rate

For the present study, a total of 722 questionnaires were distributed to the respondents (of the academic staff of 12 North West polytechnic in Nigeria), but only 546 questionnaires were returned. Out of which 546 returned questionnaires, only 539 questionnaires were usable as 3 were incomplete and 4 rejected. This shows that 546 out of 722 questionnaires represents overall response rate of 75.6 per cent, and 539 usable questionnaires represents a valid response rate of 74.7 per cent.

In line with the viewpoint of Sekaran (2003), which indicated that a minimum response rate of 30 per cent is adequate for a survey, it can therefore be stated that this study's response rate is appropriate and acceptable for further analysis. Below is the summary of the various response rate analysis and respective percentages in Table 4.1

Table 4. 1

Response Rate Analysis

Response	Frequency/Rate
No. of Distributed Questionnaire	722
No. of Returned Questionnaire	546
No of Returned and Usable questionnaires	539
No. of Returned but non-usable Questionnaires	7
No. of Questionnaires not returned	176
Response Rate	75.6%
Valid Response Rate	74.7%

Note: Designed for this study

4.3 Data Screening and Preliminary Analysis

Cleaning, editing and screening of data are very essential before carrying out any meaningful data analysis. Therefore, scholars such as Pallant (2011) claimed that a quality and significant outcome from the data collected by the researcher rely on its initial cleaning and screening. Hence preliminary data screening is very crucial in any

multivariate analysis for identifying any violation or possible breach of the key assumptions related with the application of multivariate techniques of data analysis, preliminary data screening is of significance (Hair et al., 2007).

Preliminary data screening enables and enhanced clear understanding of the data collected for any analysis. Thus, in the present research, the first stage of preliminary data screening was coding and inputting of the returned and usable questionnaires using SPSS, preliminary data analysis was conducted. Following preliminary data screening, preliminary data analysis was carried out. The analysis involves the missing value analysis, assessment of outliers, normality test and multicollinearity test were all conducted analysis (Hair, Black, Babin, & Anderson, 2010; Tabachnick & Fidell, 2007).

4.3.1 Missing Value Analysis

According to Schumacker and Loma (2004) that replacement of missing values is very important, because the available tools and techniques cannot function with missing values in the data set. Likewise, the quality of data analysis is largely contingent on the correctness of data organization and its further conversion into appropriate form for analysis (Kristensen & Eskildsen, 2010).

In every research, missing value is inevitable and an issue of concern and popular in research. Also, it is unusual to have the whole returned questionnaires completed more especially dealing with human beings as respondents (Pallant, 2013).

It is detected in the data set that certain cases have missing values; Task performance had 28 missing values, contextual performance had 13 missing values, training and development had four missing values, employee involvement had 22 missing values,

performance appraisal had two missing values, compensation had five missing values, while, recruitment and selection had seven missing values and physical working condition had five missing values. The overall missing data were 0.23 per cent, and it is less than five per cent and therefore, non-significant. The following Table 4.2 depicts the estimation of missing values.

The level at which data missing in a research differ, so also is the extent of its impact; for example, below 1 percent, there is not going to be any problem, below 5 percent it is acceptable and could be managed, if it reaches 15 percent, it requires for a severe measure using sophisticated procedure to resolve the missing value (Acuna & Rodriguez, 2004).

The result shown that, out of the 37,128 data point of the whole data collected, 86 were found missing randomly which represents 0.23%. The percentage of missing data in this study is considered non-significant as it is below the acceptable inception of 5 percent (Schafer, 1999; Tabachnick & Fidell, 2007). Basically, as the missing values happened randomly and not based on any systematic pattern, the researcher may choose to replace any values missing in the data set (Pallant, 2013; Schafer & Graham, 2002). Therefore, in this study the missing values detected were less than 5 percent and occurred entirely at random pattern, the study replaced the values using series mean as recommended by some numerous researchers (Hair *et al.*, 2010; Tabachnick & Fidell, 2007).

Table 4. 2

Total and Percentage of Missing Values

Variables	Number of Missing Values
Task performance	28
Contextual performance	13
Training & Development	4
Employee Involvement	22
Performance appraisal	2
Compensation	5
Recruitment & Selection	7
Physical working condition	5
Total	86 (out of 37,128 data points)
Percentage	0.23%

Source: Developed for this study

4.3.2 Assessment of Outliers

Byrne (2010) defined the term outliers, "as those cases whose scores are significantly dissimilar from all the others in a given set of data." Also, Barnett & Lewis, (1994) explained that outliers refer to the "observations or subsets of observations that appear to be irregular or inconsistent with the remainder of the data. And such seemingly conflicting observations are called outlier (Barnett & Lewis, 1994). According to Hair et al. (2010) outliers are the values that have uncommon attributes and vary totally from other values. And this indicates that the outliers are out-of-range values in a given dataset. Given this fact, it is held that the presence of irregular observations in the dataset, which is meant for regression analysis, can adversely affect the estimates of regression coefficients and consequently render the results inaccurate (Verardi & Croux, 2008; Rousseeuw & Hubert, 2011). Presence of outlier in a dataset can be due to wrongful data entry.

In the present study, detecting of outliers includes some stages. The first stage was the calculation of frequency through SPSS. The frequency table showed that no observation was found to be out of normal range. Additionally, standardized values with a cut-off of

± 3.29 ($p < .001$) through observation of Z-score as a criterion for outlier treatment was calculated based on the recommendation by Tabachnick and Fidell (2007), in order to spot any univariate out-of-range value in the dataset. Established on the Tabachnick and Fidell's (2007) standard, that none of the observations was found to be univariate outlier.

It has been argued in the literature (Verardi & Croux, 2008) that the presence of outliers in a data set is capable of distorting the regression coefficient estimates, and consequently lead to an undependable result in a regression-based analysis. In order to detect outliers arising from the error of original entry, SPSS was used in detecting any observation outside the value label in the variable view of SPSS.

To achieve this, the frequency tables were generated and tabulated using minimum and maximum statistics. Therefore, based on the outcome of this exercise, no case of outlier was detected because no value was outside the defined range. Given Tabachnick and Fidell's (2007) position, standardized values with a cut-off of ± 3.29 ($p < .001$) was adopted as threshold for testing data against univariate outliers. Consistent with Tabachnick and Fidell's (2007) parameter for identifying outliers, there is no case of outlier observed in the dataset.

Following the univariate outliers, test, using Mahalanobis distance (D^2), was conducted to find multivariate outliers. Mahalanobis distance (D^2) denotes the gap between a case and the centroid of the rest of the cases contained in a dataset in which the centroid is the point created at the intersection of the means of all the constructs. Given the eight variables of the study, the tabulated chi-square is 26.13 ($p = 0.001$). This benchmark should not be exceeded, but if Mahalanobis values exceed this benchmark, then such values should be removed. Based on the threshold, five cases were found to be

multivariate outliers and then deleted. The cases are 54, 202, 364, 421, and 427. With the deletion of the cases, the total numbers of cases remained for the analysis are 539. Table 4.3 presents the multivariate outliers detected and deleted.

Table 4. 3
Multivariate Outliers

ID	Mahalanobis
202	36.97549
427	35.62419
54	34.26917
421	30.58792
364	26.43587

4.3.3 Normality Test

Normality test is a vital postulation in multivariate investigation (Hair et al. 2010). According to Tabachnick and Fidell (2013), normality manages data distribution for constructs and its relationship with normal distribution. Also, among one of the basic assumptions of regression analysis is that each variable in the study and all linear groupings of the variables are normally distributed (Tabachnick & Fidell, 2013).

Traditionally, number of earlier studies (Cassel, Hackl, & Westlund, 1999; Reinartz, Haenlein, & Henseler, 2009; Wetzels, Odekerken-Schröder, & van Oppen, 2009) has postulated that PLS-SEM offers accurate model estimations with non-normal data. However, this assumption may turn to provides incorrect model approximations with extremely non-normal data. However, the assumption may not be correct. Because, in recent times, Hair et al. (2016) commended that should conduct normality data test. Likewise, (Chemick 2008; Chatterjee & Yilmaz, 1992), claimed that data with high skweness or kurtosis can inflate the bootstrapped standard error estimations. Again,

highly skewed and kurtosis data lead to underestimation significance of path coefficient (Dijkstra, 1983; Peng & Lai, 2012; Ringle et al. 2012a).

Hence, this study engaged multivariate normality test to evaluate the data distribution using kurtosis (i.e., the peakedness or flatness of the distribution compared with the normal distribution) and skewness (i.e., the balance of distribution at centered or proportioned with about the same shape on both sides) (Hair, Anderson, Tatham, & Black, 2010).

Also, the study employed both statistical (Hair et al. 2010; Kline, 2011; Tabachnick & Fidell, 2013) and graphical methods (Fidel, 2009) to check the normality. Checking of Normality was done based on the general rule of West et al. (1995) and Curun et al. (1996) that Skewness should be less than 2 and kurtosis less than 7. In the same manner, Kline (2016) also maintained that skewness values of more than 3 and kurtosis of more than 10 signify a problem, while the values of skewness and kurtosis of more than 20 denote a serious problem of non-normality. All the values of both skewness and kurtosis of all items/indicators are within the acceptable range (<2 and <7) (Bhatti, Hee, & Sundram, 2012; Verma, 2013) as shown in the Table 4.4 below.

Table 4. 4

Normality Test: Skweness and Kurtosis Statistics

Construct	Min	Max	Mean	SD	Skweness Sta	SD Skweness	Kurtosis Sta	SD Kurtosis
TP	2	5	4.109	0.615	-0.589	-5.609	0.05	0.239
CP	1.75	5	4.218	0.518	-0.805	-7.87	1.087	5.201
TD	1.67	5	3.792	0.672	-0.226	-2.15	-0.449	-2.148
EI	1	5	3.501	0.880	-0.607	-5.781	0.437	2.091
PA		5	3.193	1.089	-0.363	-3.457	-0.71	-3.397
CMP		5	3.233	1.087	-0.028	-0.238	-0.918	-4.392
RS		5	3.154	1.088	-0.169	-1.609	-0.958	-4.584
WC		5	3.551	0.865	-0.422	-4.019	-0.432	-2.067

Note: Skweness and Kurtosis values Range from + 2.58–

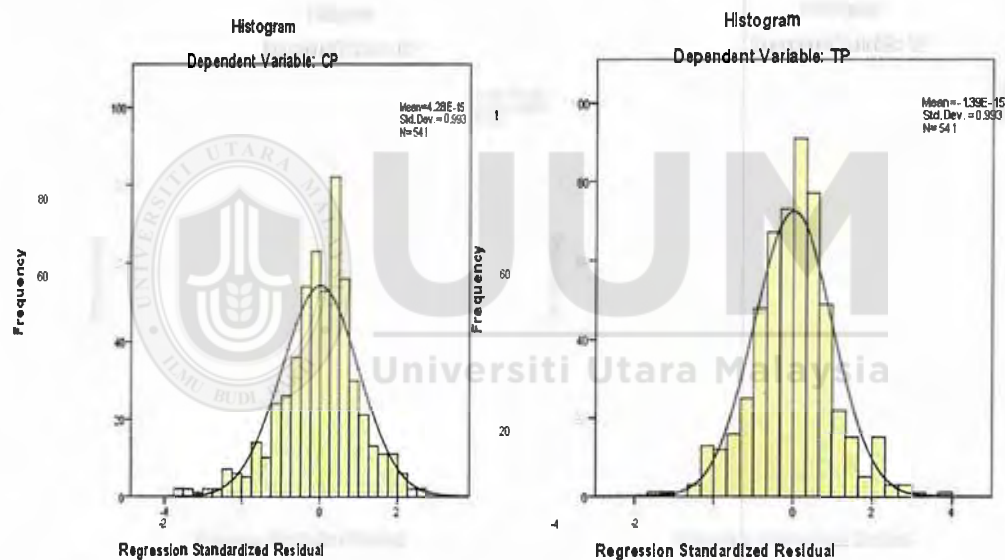


Figure 4. 1

Histogram and Normal Probability Plots.

Usually, normality is determined through histogram residual plots which refers to the shape of data distribution to an individual continuous variable and its correspondence to the normal distribution. If the assumption is not met, the residuals should be normally and independently distributed (Tabachnick & Fidell, 2007). The histogram and normality plots were shown that the collected data follow normal pattern because all the bars in the histogram are close to the curve.

4.3.4 Multicollinearity Test

Multicollinearity can be defined as a situation in which two or more exogenous latent variables become extremely correlated (Sekaran & Bougie, 2010). Therefore, the existence of multicollinearity between the exogenous latent variables can substantively change the estimates of regression coefficients and their statistical significance tests (Hair *et al.*, 2006). Specifically, multicollinearity improves the standard errors of the coefficients, which on the opposite render coefficients statistically insignificant (Tabachnick & Fidell, 2007). As recommended by scholars Chatterjee and Yilmaz (1992), and Peng and Lai (2012) the process in detecting multicollinearity contains two techniques (correlation matrix and VIF and tolerance). In this study, all the techniques were used.

Firstly, correlation matrix of the exogenous latent variables was investigated. According to Hair *et al.* (2010), a correlation coefficient of 0.90 and above signifies multicollinearity among the exogenous latent constructs. Table 4.5 below displays the correlation matrix of all exogenous latent constructs.

Table 4. 5

Multicollinearity Test: Correlation Matrix of the Exogenous Latent Constructs

Construct	TD	EI	PA	CMP	RS	WC
TD	1					
EI	.523**	1				
PA	.563**	.730**	1			
CMP	.553**	.671**	.806**	1		
RS	.571**	.665**	.780**	.818**	1	
WC	.285**	.463**	.303**	.391**	.327**	1

NOTE: **. Correlation is significant at the 0.01 level (2-tailed); TD= Training and development; EI= Employee Involvement; PA= Performance Appraisal; CMP= Compensation; RS= Recruitment and Selection

As indicated in Table 4.5, the relationships among the exogenous latent construct are lower than the recommended benchmark values of .90 or more, which suggest that the exogenous latent constructs are independent and not highly correlated.

Following the investigation of correlation matrix for the exogenous latent constructs, variance inflation factor (VIF) and tolerance value were tested to detect multicollinearity problem. Thus, Hair, Ringle and Serstech, (2011) suggested that multicollinearity exist if VIF value is higher than 5 and tolerance value is less than 0.20. Table 4.6 shows the VIF values and tolerance values for the exogenous latent constructs.

Table 4. 6
Multicollinearity Test based on Tolerance and VIF values

Constructs	Tolerance	VIF
Training & Development	.619	1.615
Employee Involvement	.384	2.606
Performance Appraisal	.254	3.934
Compensation	.246	4.063
Recruitment & Selection	.276	3.620
Work Condition	.748	1.336

Note: Tolerance value > 0.2 and VIF value < 5

In Table 4.6 above, it shows that there is no multicollinearity among the exogenous latent constructs as the tolerance levels of all the independent variables are greater than 0.20 and VIF is less than five for all the variables as suggested by (Hair et al. 2011). This clearly shows that the absence of multicollinearity between the variables. Hence, correlation matrix and collinearity statistics using tolerance and VIF showed that multicollinearity does not exist and it is not an issue in the present study.

4.4 Non-Response Bias

Based on the declaration of Lambert and Harrington (1990), non-response bias is “the differences in the answers between non-respondents and respondents”. Therefore, to

evaluate the possibility of non-response bias, a time-trend extrapolation approach, which requires comparing between early and late respondents (which means non-respondents) as suggested by Armstrong and Overton (1977) was conducted. Their argument is that; late respondents share related characteristics with non-respondents. Similarly, Pearl and Fairly (1985; Sheikh, 1981) proclaimed that there is likelihood of detecting bias in the non-response rate irrespective of its size.

So, to minimize the case of non-response bias, Lindner and Wingenbach (2002) suggested that a minimum response rate of 50% should be attained. Hence, this study considered the respondents into two groups: the early and the late group, those who responded within 30 days was considered as early respondents (30/10/2018- 14/12/2018) while those who responded after 30 days regarded as late respondents (17/12/2018- 30/01/2019) (Chen et al., 2003; Vink, & Boomsma, 2008). And most of the usable questionnaires are from the early respondents (i.e., 384 responses), representing 70.3%, while 162 responses representing 29.7% are considered as late respondents.

Correspondingly, independent samples t-test was carried out to detect any possible non-response bias on the present study variables, including recruitment and selection, training and development, compensation, performance appraisal, task performance and contextual performance to test whether the means for early and late responses were not significantly different from each other. Table 4.7 indicated that the equal variance significance values for each of the variables of the study were greater than the 0.05 significance level of Levene's test for equality of variances and going by the position of Pallant (2010) and Field (2009) the assumption of equal variances between early and late responses has not

been violated. Therefore, it can be established that non-response bias was not a major concern in this study. This is also affirmed by the fact that this study achieved 74.7 per cent response rate, which is over and above what was suggested by Lindner and Wingenbach (2002). Hence, the issue of non-response bias does not appear to be a major concern in this research.

Table 4. 7
Results of Independent Samples T-test for Non-Response Bias

Constr.	Group	N	Mean	Std. Deviation	Levene's Test for Equality of Variances	
					F	Sig.
TP	1 Early Response	381	4.09	.664	28.328	.235
	2 Late Response	160	4.16	.475		
CP	1 Early Response	381	4.22	.535	5.886	.156
	2 Late Response	160	4.22	.439		
TD	1 Early Response	381	3.81	.671	.443	.506
	2 Late Response	160	3.77	.639		
EI	1 Early Response	381	3.54	.974	40.277	.323
	2 Late Response	160	3.43	.596		
PA	1 Early Response	381	3.23	1.132	6.976	.850
	2 Late Response	160	3.13	.957		
CMP	1 Early Response	381	3.24	1.113	3.935	.478
	2 Late Response	160	3.25	1.015		
RS	1 Early Response	381	3.13	1.113	2.222	.137
	2 Late Response	160	3.20	1.021		
WC	1 Early Response	381	3.59	.851	.027	.870
	2 Late Response	160	3.49	.863		

Note: there are no issues of non-response bias that could affect the analysis

Common method bias generally is a bias, called common method variance (CMV). Therefore, CMV can be defined as the variance attributable to measurement method rather than to the constructs intended to represent (Campbell & Fiske, 1998; Hsiao, Wu, & Yao, 2014; Podsakoff et al., 2003). It is forged correlation among variables initiated by using the similar method to measure each variable in a given study (Malhotra, Kim, & Patil, 2006; Podsakoff et al., 2003) and hence, may lead to invalid conclusions about

relationships among variables by expanding or degrading results (Conway & Lance, 2010; Podsakoff, MacKenzie, & Podsakoff, 2012; Podsakoff et al., 2003).

In general, academic researchers see common method bias as a likely problem because it is the main source of measurement error (Podsakoff et al., 2003). Measurement error also, threatens the validity of the conclusions of the results of the link among measures of two or more constructs, such an error contains of random and systematic measurement errors (Bagozzi & Yi, 1993). However, both forms of errors are challenging, systematic error is the most severe problem as it provides false details for the connections among measures of different constructs (Campbell & Fiske, 1998; Podsakoff et al., 2003).

Precisely, random errors are all about errors concern with some items measuring similar construct. "Random errors tend to average-out across numerous items; errors that increases scores on one item likely to be balance by errors understate other items" (Schwab, 2013). The argument here is that random errors usually became common problem in research. Hence, more items for a construct, more success are controlled in random errors. In addition, systematic error (i.e., method effects or error presented by a measurement method) is a type of error, which is more risky, and can rigorously increase or decrease the observed relationship among independent and dependent variables (Rungtusanatham, Choi, Hollingsworth, Wu, & Forza, 2003) and thus, can significantly undermine the research outcomes (Podsakoff et al., 2003).

Similarly, as the study is a self-reported survey that collected data using a single source is concerned with common method bias (Lindell & Whitney, 2001; Spector, 2006), hence common method bias required to be observed. So, to investigate and control common

method bias, the study used two fundamental approaches as suggested by many researchers (Podsakoff et al., 2012; Podsakoff et al., 2003; Williams, Hartman, & Cavazotte, 2010) these are procedural and statistical remedies (Chang, Van Witteloostuijn, Eden, & Eden, 2010; Podsakoff et al., 2012; Viswanathan & Kayande, 2012; Williams et al., 2010). Indeed, procedural remedies state to the numerous measures taken into consideration during the forming and administering questionnaires to correct or avoid the damaging effects of inaccurate response (Chang et al., 2010; Podsakoff et al., 2012).

In this present study, some of these remedies applied are; first, questionnaire design avoided complicated questions as well as complex wordings and grammar. Moreover, the scale items have been put down in an understandable and clear manner, which is less subjected to bias. Secondly, the researcher provided a very precise and clear guidelines on how the questionnaire will be filled, also each concept have been defined clearly to avoid misinterpretation. Thirdly, the respondents have been notified that all the questions are equal, as they can make their own decision by answering the questions objectively. Finally, the researcher clearly stated in the front page of the questionnaire that, the questionnaire will be used for academic reasons, also be treated with the highest level of confidentiality.

Nonetheless, the use of the procedural remedies frequently removes or minimize the damaging effects of common method bias, it is generally difficult if not impossible for a research to find procedural remedies that ascertain all its requirements (Podsakoff et al., 2012; Podsakoff et al., 2003). Henceforth, the statistical remedies might be also considered (Podsakoff et al., 2012; Podsakoff et al., 2003) Yet, this process cannot be

regarded as a substitute to the procedural remedies rather than a compliment (Podsakoff *et al.*, 2012) unlike procedural remedies that are appropriate prior to data collection, statistical remedies of regulating common method bias can only be used after the collection of the data.

Harman's single-factor is among the frequently used statistical research technique (Podsakoff *et al.*, 2003). Therefore, this technique has been utilized by numerous researchers in order to resolve the problematic issue of common method variance (Anderson & Bateman, 1997; Aulakh & Gencturk, 2000; Greene & Organ, 1973; Organ & Greene, 1981). In order to use Harman's (1968) single factor in testing common method bias, all items of the principal constructs are to be keyed into principal component factor analysis (Podsakoff & Organ, 1986). Therefore, it represents the presence of common method bias when the factor analysis offers only one single factor, or when a single factor indicates the greatest part of the covariance between the measures (Podsakoff *et al.*, 2003).

Following the above-mentioned Harman's single-factor statistical remedy of common method variance, the test was done by subjecting all the variables of the study to PLS measurement model analysis which covers the common exploratory factor analysis. This was done in order to ascertain the number of factors that are essential to account for the variance in the variables (Podsakoff & Organ, 1986). The output of the model analysis indicated that common method bias is not a major concern and there is not tendency that there would be high correlations among variables of this study.

4.5 Descriptive Statistics: Demographic Profile of Respondents

Here, the section presented the demographic information of the participants and the organization to which they belong, both frequency distribution and percentage were examined. Demographic characteristics in this study include age, marital status, gender, highest educational level, level of position and year of service in current Polytechnic (see Table 4.8).

Table 4. 8

Demographic Profile of Respondents (n=539)

Characteristics	Frequency	Percentage(%)
Age		
20-25	10	1.8
26-30	27	4.9
31-35	114	20.9
36-40	198	36.3
40 and above	197	36.1
Marital Status		
Married	57	10.4
Single	489	89.6
Gender		
Male	467	85.5
Female	79	14.5
Highest Educational Level		
HND/Degree	133	24.4
PGD/Masters	315	57.7
PhD	98	17.9
Level of Position		
Lecturer III	94	17.2
Lecturer II	129	23.6
Lecturer I	102	18.7
Senior Lecturer	121	22.2
Principal Lecturer	47	8.6
Chief Lecturer	53	9.7
Year of service in current Polytechnic		
2-5 years	107	19.6
6-10 years	188	34.4
11-15 years	109	20.0
16-20 years	60	11.0
21-25 years	50	9.2
26 and above	32	5.9

As presented in Table 4.8, majority of the respondents that partake in the survey were males which constitute 467 respondents representing 85.5% while the remaining 79 respondents indicating 14.5% were females. Regarding the marital status, single people occupied the largest number that is 489 respondents representing 89.6% while married people has the lowest number of response 57 respondent representing 10.4% and this is commonly found in Nigerian institutions. Again, regarding the age, 10 respondents representing 1.8% of the participants were between 20-25 years, followed by the ages between 26-30 years with 27 respondents, which accounted for 4.9% of the total sample. Also, ages between 31-35 years, occupied 114 respondents which represents 20.9% of the sample. Similarly, ages between 36-40 years there were 198 respondents that participated in the survey representing 36.3%. Also, the ages of 40 and above that participated in the study were 195 respondents, representing 36.1%.

Moreover, the highest educational level also considered as demographic characteristics with PGD/masters has the highest number of response with 315 respondents representing 57.7%, while HND/degree constitutes 133 participants representing 24.4% of the sample, and only 98 people of the respondents are PhD holders representing 17.9%. Regarding the level of position in the sector, most of the respondents are in the category of lecturer 11 who's constituted 129 responses representing 23.6%. The second highest category are senior lecturers with 121 respondent and representing 22.2%. Another, 18.7% of 102 respondents were from lecturer 1 category. Also, lecturer 111 categories were represented with 17.2% and 94 respondents respectively. While 53 respondents were from chief

lecturers, representing 9.7%. And the least are the principal lecturers with 47 respondents and 8.6% respectively.

Finally, the year of service in current Polytechnics of the respondents put into consideration in this study where respondents 6-10 years took the highest responses of about 188 respondents representing 34.4%, followed by 11-15 years occupied 109 respondents representing 20.0%, while participants with 2-5 presented only 107 respondents representing 19.6% respectively. Additionally, those respondents having 16-20 years of service were 60 with representation of 11%. Again, respondents with 21-25 in service with their polytechnics constituted 50 and represented by 9.2%. The minority among the respondents in terms of their year of service in the current polytechnics are the respondents with 32 responses which were represented by only 5.9%.

In totality, from the above explanation it can be understood that the respondents varied substantially in terms of their backgrounds, which indicates that the data used in the study was from the respondents of different demographic backgrounds, and thus enriching generalizability of the result of the study.

4.6 Descriptive Statistics Study of Latent Variables

In this research, descriptive statistics of the study constructs were presented. Essentially, the mean and standard deviation were computed to determine the descriptive characteristics of the present study variables. This is consistent with the view of Sekaran and Bougie (2010) that descriptive statistics of dimensions explained through mean, standard deviation, variance, etc. collectively seek to offer a researcher a general view concerning how the survey respondents have responded to the survey instrument used in the study. In this study all the variables were measured using a five-point Likert scale

ranging from 1= strongly disagree to 5= strongly agree. The results are shown in Table 4.9.

Table 4. 9

Descriptive statistics of the latent variables

Variables	No. of Items	Mean	Std Deviation
Task Performance	11	4.11	0.615
Contextual Performance	16	4.22	0.518
Training & Development	6	3.79	0.672
Employee Involvement	12	3.50	0.880
Performance Appraisal	5	3.19	1.089
Compensation	5	3.23	1.086
Recruitment & Selection	6	3.15	1.088
Physical working Condition	7	3.55	0.865

Note: Developed for this Study

Table 4.9 above depicted the descriptive statistics of all the study variables which possessed mean ranging from 3.15 to 4.22 and the standard deviation of all dimensions ranged from 0.52 to 1.09. These results showed the mean and standard deviation of training and development is 3.79 and 0.67 respectively. This indicates that the respondents of this study moderately agreed with the statement regarding this construct. Also, the mean and standard deviation for the remaining constructs are 3.50 and 0.88 for employee involvement; 3.19 and 0.88 for performance appraisal; 3.23 and 1.09 for compensation; 3.15 and 1.08 for recruitment & selection; while 3.55 and 0.86 is for working condition respectively.

Similarly, for the dependent variable (Job Performance), comprises of task performance with variable mean and standard deviation value is 4.11 and 0.62 and contextual performance has 4.22 and 0.52 respectively, this also shows that the level of agreement by respondents on this variable is also moderate.

In summary, the means of all the variables in this research showed that the average option chosen by respondents is moderate. On the other hand, it signifies that data points are closed to the mean, as the standard deviations of all the study variables are not up to 1, except those of task performance 0.615; contextual performance 0.518; training and development 0.672; employee involvement 0.880; and physical working condition 0.865 respectively.

4.7 Assessment of Partial Least Square (PLS) Structural Equation Modeling Approach

According to Hair *et al.* (2011) Path Models are diagrams developed to present variables and their path coefficient relationships that are observed when structural equation modeling (SEM) duly applied. Also, Hair *et al.* (2014) maintained that constructs such as latent variables are symbolized in the path models as ovals, while items or indicators (i.e., visible variables) that are directly measured substitute constructs that encompass the raw data are shown as rectangles in the path models. These researchers continue to argue that arrows indicate the link between latent variables, as well as among such constructs and their indicator. These arrows are constantly single-headed in PLS-SEM, and hence, indicating directional relationships.

Additionally, Hair *et al.*, (2014) and Henseler *et al.*, (2009) explained that PLS-SEM path model comprises of two components, measurement model (called outer model in PLS-SEM) and structural model (known as the inner model in PLS-SEM). Precisely, measurement model refers to a component of the path model that encompasses indicators and their connections with their respective latent construct.

A measurement model is a kind of measurement model in which the direction of arrows is from the latent variable to the assigned indicators, indicating that, the latent construct causes the measurement of the indicator variables. Figure 4.2 represents the procedures of PLS-SEM path model assessment used in the present study (Hair, Hult, Ringle, & Sarstedt, 2014; Henseler *et al.*, 2009; Klärner, Sarstedt, Hoeck, & Ringle, 2013).

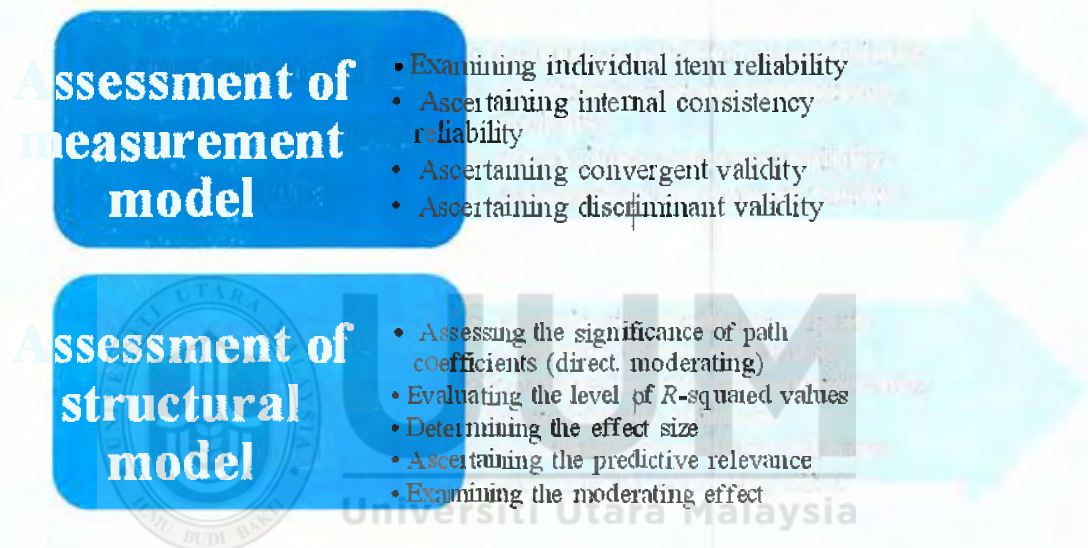


Figure 4. 2
A Two-Step Process of PLS Path Model Assessment
 Source: (Henseler *et al.*, 2009).

4.8 Assessment of the Measurement Model

In using Smart PLS, measurement model was investigated, as recommended by scholars (Hair, Hult, Ringle, & Sarstedt, 2017; Hair *et al.*, 2014; Hair *et al.*, 2011; Henseler *et al.*, 2009) and should involve determination of individual item reliability, internal consistency reliability, discriminant validity and convergent validity. Figure 4.3 shows measurement model of this study.

Table 4. 10

Internal Consistency and Convergent Validity

Constructs	Items	Loadings	CA	CR	AVE
Compensation	CMP1	0.859	0.920	0.940	0.758
	CMP2_1	0.895			
	CMP3 1	0.900			
	CMP4 1	0.844			
	CMP5 1	0.855			
Contextual Performance	CP11 1	0.689	0.917	0.929	0.502
	CP12 1	0.720			
	CP13 1	0.800			
	CP14	0.814			
	CP15 1	0.786			
	CP16	0.738			
	CP1 1	0.642			
	CP2 1	0.654			
	CP3 1	0.685			
	CP4_1	0.666			
	CP5	0.639			
	CP6 1	0.670			
Employee Involvement	CP9 1	0.679			
	E11	0.778	0.959	0.964	0.689
	E110_1	0.828			
	E11 1 1	0.844			
	E112_1	0.822			
	E12_1	0.773			
	E13_1	0.802			
	E14_1	0.850			
	E15_1	0.817			
	E16 1	0.850			
	E17 1	0.851			
	E18_1	0.880			
	E19_1	0.861			
Performance Appraisal	PA1	0.891	0.954	0.965	0.846
	PA2	0.920			
	PA3	0.924			
	PA4	0.943			
	PA5	0.918			
Recruitment and Selection	RS1	0.860	0.946	0.957	0.789

	RS2	1	–	0.896				
	RS3	1	–	0.922				
	RS4	1	–	0.926				
	RS5	1	–	0.905				
	RS6			0.817				
Training and Development	TD1			0.646	0.828	0.872	0.534	
	TD2			0.623				
	TD3	1	–	0.720				
	TD4			0.776				
	TD5	1	–	0.826				
	TD6	1	–	0.771				
Task Performance	TP1			0.740	0.930	0.940	0.588	
	TP10			0.739				
	TP1_1_1			0.730				
	TP2	1	–	0.766				
	TP3	1	–	0.751				
	TP4	1	–	0.709				
	TP5	1	–	0.774				
	TP6			0.787				
	TP7	1	–	0.807				
	TP8	1	–	0.795				
	TP9	1	–	0.826				
Physical Working Condition	WC1_1			0.863	0.922	0.938	0.682	
	WC2_1			0.831				
	WC3	1	–	0.860				
	WC4			0.806				
	WC5			0.837				
	WC6		–1	0.811				
	WC7	1	–	0.770				

Source: Researcher's Estimate based on Survey Data

4.8.1 Content Validity

Hair et al. (2010), described content validity as to indicate the suitability and capability of items (i.e. indicators) spawned for a particular construct in measuring the main concept in a given research. Following by the position of Bohrnstedt (1970) and Vinzi, Lauro, and

Tenenhous (2003), Principal Component Analysis (PCA) method is the method that should be adopted for measuring the basic factor structure of the items constituting a certain construct. PCA is embedded in Smart PLS and factor loadings were created for all items in it. Although it might have been theoretically proved in the literature review, it is basically required that all items must show highest loading values on their respective constructs than that on other constructs. Moreover, individual item reliability was evaluated by examining the outer loadings of each latent construct (Duarte, Alves, & Raposo, 2010; Hair et al., 2014; Hair, Sarstedt, Ringle, & Mena, 2012; Hulland, 1999).

As depicted in Figure 4.3 and Table 4.10 above and based on the rule of thumb for retaining indicators items with loadings between .40 and .70 (Hair et al., 2014), the indicators showed highest values on their respective constructs as compared to their loadings on other constructs. Likewise, the indicators entail significantly and acceptably high loadings, and thus affirming the content validity of the constructs involving contextual performance, compensation, employee involvement, performance appraisal, recruitment and selection, training and development, and physical working condition. However, out of 68 items measuring eight (8) reflective constructs (recruitment and selection, training and development, compensation, performance appraisal, employee involvement, physical working condition, task performance and contextual performance) 3 items (CP7, CP9, and CP10) from contextual performance were deleted because their loadings fell below the threshold of 0.5 (Hair et al., 2010; 2011). Therefore, 65 items were retained in the whole model as they had loadings between .623 and .943.

4.8.2 Internal Consistency Reliability and Convergent Validity

According to Bijttebier *et al.* (2000) and Sun *et al.* (2007) internal consistency reliability can be defined as the extent to which all items on a particular (sub) scale are measuring the same concept. Similarly, composite reliability coefficient and Cronbach alpha coefficient are the most commonly used estimators of the internal consistency reliability of an instrument in academic research (e.g., Bacon, Sauer, & Young, 1995; McCrae, Kurtz, Yamagata, & Terracciano, 2011; Peterson & Kim, 2013). In the present study, composite reliability coefficient was chosen to ascertain the internal consistency reliability of measures adapted based on two main justifications. Firstly, composite reliability coefficient offers a much less biased assessment of reliability than Cronbach's alpha coefficient because the later assumes all items contribute equally to the construct without considering the actual contribution of an individual item loadings (Barclay, Higgins, & Thompson, 1995; Götz, Liehr-Gobbers, & Krafft, 2010).

Secondly, Cronbach's alpha coefficient may over or under-assess the scale reliability. The composite reliability indicators loadings are different and can be interpreted in the same way as Cronbach's α (i.e., no matter what reliability coefficient is employed, an internal consistency reliability value above .70 is considered as acceptable for a suitable model, while value below .60 signifies lack of reliability). Yet, the interpretation of internal consistency reliability using composite reliability coefficient was based on the rule of thumb provided by Bagozzi and Yi, (1988) and Hair *et al.* (2011), who recommended that the composite reliability coefficient should be at least .70 or more. Table 4.10 shows that composite reliability coefficient of each the constructs ranged from .872 to .965, with each higher than the minimum satisfactory level of .70, therefore, internal consistency

reliability of all the reflective constructs (composite reliability) in this study is adequate (Bagozzi & Yi, 1988; Hair et al., 2011).

Furthermore, convergent validity is the extent to which a measure correlates positively with alternative measures of the same construct (Hair et al., 2017). Convergent validity assessment is based on Average Variance Extracted (AVE) values. AVE, which should be 0.5 or above (Fornell & Larcker, 1981; Hair et al., 2010), refers to the grand mean value of the squared loadings of the indicators associated with the construct (i.e., the sum of the squared loadings divided by the number of indicators) (Hair et al., 2017). Thus, the AVE is equivalent to the communality of a construct.

As depicted in Table 4.10 above, AVE values of the constructs of this study ranged between 0.502 and 0.846. Thus, the results which were discerned from the constructs' loadings, convergent reliability, and AVE affirm the internal consistency and convergent validity of the constructs of this study.

4.8.3 Discriminant Validity of Measurement Models

Duarte and Roposo (2010) define discriminant validity as the level to which a particular latent construct is vary from other latent constructs. Therefore, the importance of discriminant validity is to check the construct validity of the outer model in which it should certify that the measures which shouldn't be related, are really not found related after conducting the analysis. Previously, there were two (2) methods to ascertain discriminant validity in measurement models (Fornell & Larcker, 1981; Chin, 1998; Chin, 2010): discriminant validity by Fornell and Larcker (1981) and cross-loading criterion by Chin (1998; 2010). However, given the fact that the recent research that critically examined the performance of cross-loadings and the Fornell-Larcker criterion for

discriminant validity assessment has found that the two approaches could not reliably detect discriminant validity issues (Henseler et al., 2015), therefore, heterotrait-monotrait ratio (HTMT) of the correlations was adopted in this study for discriminant validity evaluation. HTMT is the ratio of the between-trait correlations to the within-trait correlations (Hair et al., 2017).

Table 4. 11

Discriminant Validity (HTMT criterion)

Constructs	CMP	CP	EI	PA	RS	TD	TP	WC
CMP								
CP	0.409							
EI	0.711	0.438						
PA	0.858	0.382	0.761					
RS	0.877	0.405	0.696	0.821				
TD	0.622	0.571	0.566	0.619	0.632			
TP	0.515	0.744	0.606	0.567	0.539	0.571		
WC	0.423	0.282	0.492	0.322	0.348	0.327	0.292	

Source: Researcher's Estimate based on Survey Data

The result in Table 4.11 confirms the discriminant validity of this study's constructs, as the HTMT values for all pairs of constructs in a matrix fell below the threshold value of 0.90. In sum, having confirmed the content validity, convergent validity, and discriminant validity of the constructs of this research, it can then be claimed that the construct validity has been established in this study.

4.9 Assessment of the Structural Model

As stated earlier, once the measurement model (outer model) is satisfied both the reliability and validity of the model are ascertained, the next stage was to assess the structural model results. This involved evaluating the structural model's predictive abilities and the relationship among the constructs. The fundamental principles for evaluating the structural model in PLS-SEM are the significance of the path coefficients,

coefficient determination (R^2), the effect size (f^2) and predictive relevance (Q^2) (Hair *et al.*, 2014). This present study carried out a systematic model analysis of the structural model to provide a comprehensive picture of the results and hypotheses tested.

4.9.1 Hypotheses Testing for Direct Relationships between Independent Variables and Dependent Variable

The first model (Figure 4.4) concentrated on the analysis of the direct relationship between the IVs and the DV (H1a, b to H5a, b) and indirect relationship (H6a, b to 10a, b). The assessment of the structural model begins with an examination of the direct links between the independent constructs (IVs) (i.e., recruitment and selection, compensation, performance appraisal, training and development, employee involvement) and the dependent variable (DV) task performance and contextual performance. The size of the path coefficients was ascertained through PLS-SEM algorithm (Figure 4.4) and the significance of the relationship was also ascertained through PLS-SEM bootstrapping method (Figure 4.4) in the Smart PLS 3. The study used the standard bootstrapping process with a number of 5000 bootstrap sub-samples from 541 cases to assess significance of the path coefficients (Hair *et al.*, 2016; Hair *et al.*, 2014; Hair *et al.*, 2011; Henseler *et al.*, 2009).

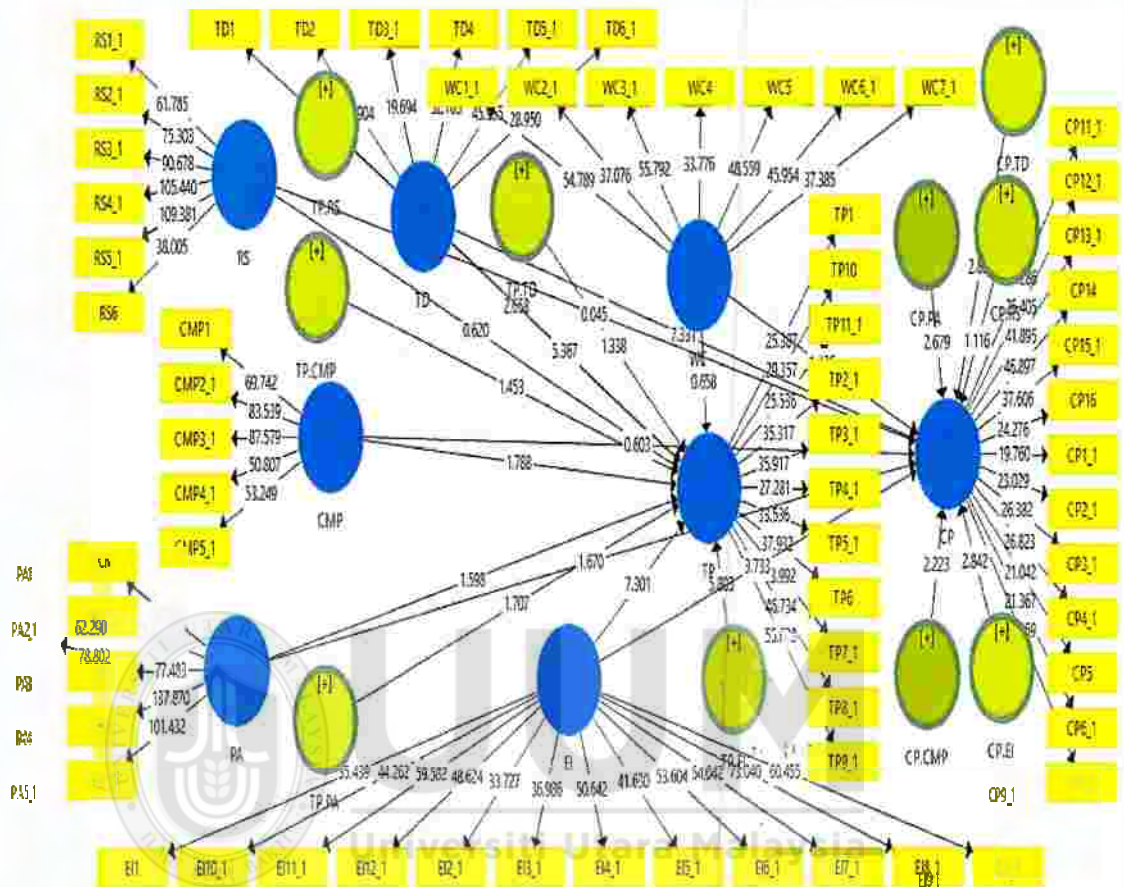


Figure 4. 4

PLS-SEM Algorithm Direct Relationship (Measurement Model) IVs and DV

From the PLS-SEM algorithm and bootstrapping method as stated above, Figure 4.4 indicates the path coefficient of the IVs (i.e., recruitment and selection, compensation, performance appraisal, training and development, employee involvement) and the dependent variable (DV) task and contextual performance. Additionally, the 20 hypotheses of this research were tested through the structural model evaluation. Based on Figure 4.4 and Table 4.12, the result ($\beta = 0.251$, $t = 5.546$, $p < 0.01$; $\beta = 0.112$, $t = 1.725$, $p < 0.05$; $\beta = 0.394$, $t = 6.870$, $p < 0.01$) indicates that training and development, performance appraisal, and employee involvement have significant effect on task performance respectively, and thereby hypotheses 2a, 4a, and 5a are supported.

Likewise, the result ($\beta = 0.409$, $t = 7.655$, $p < 0.01$; $\beta = -0.132$, $t = 1.695$, $p < 0.05$; $\beta = 0.196$, $t = 3.084$, $p < 0.01$) indicates that training and development, performance appraisal, and employee involvement have significant effect on contextual performance respectively, and thereby hypotheses 2b, 4b, and 5b are supported. However, hypotheses 1a, 1b, 3a, and were not supported as the result ($\beta = 0.037$, $t = 0.540$, $p > 0.05$; $\beta = 0.003$, $t = 0.483$, $p > 0.05$; $\beta = -0.104$, $t = 1.621$, $p > 0.05$; $\beta = 0.047$, $t = 0.576$, $p > 0.05$) revealed a non-significant effect of recruitment and selection and compensation on both task and contextual performances respectively.

Table 4. 12

Results of hypothesis testing

Constructs	Beta	T Stat	P Values	Decision
Direct Path				
RS->TP	0.037	0.540	0.295	Not Supported
RS-> CP	0.003	0.043	0.483	Not Supported
TD->TP	0.251	5.546	0.000	Supported
TD->CP	0.409	7.655	0.000	Supported
CMP-> TP	-0.104	1.621	0.053	Not Supported
CMP->CP	0.047	0.576	0.283	Not Supported
PA-> TP	0.112	1.725	0.043	Supported
PA->CP	-0.132	1.695	0.045	Supported
EI-> TP	0.394	6.870	0.000	Supported
EI-> CP	0.196	3.084	0.001	Supported
Moderating Effect				
WC.RS-> TP	-0.147	2.562	0.005	Supported
WC.RS-> CP	-0.095	1.263	0.104	Not Supported
WC.TD-> TP	0.066	1.511	0.066	Not Supported
WC.TD-> CP	0.136	2.704	0.004	Supported
WC.CMP-> TP	0.102	1.529	0.064	Not Supported
WC.CMP-> CP	0.149	1.909	0.028	Supported
WC.PA->TP	-0.117	1.734	0.042	Supported
WC.PA-> CP	-0.175	2.676	0.004	Supported
WC.EI-> TP	0.226	5.366	0.000	Supported
WC.EI-> CP	0.131	2.678	0.004	Supported

Note: 13 hypotheses are accepted based on their t-values and there were no evidence to support 7.

4.9.2 Assessment of Variance Explained in the Endogenous Latent Variables

Another assessment and significance of structural model for the link between independent variables (recruitment and selection, compensation, performance appraisal, training and development, employee involvement) and dependent variable (Task Performance & Contextual Performance) in the PLS-SEM model is evaluation of coefficient of determination (R^2) (Hair et al., 2011, 2012; Henseler et al., 2009). R^2 is the amount of the predictive accurateness of the model (Hair et al., 2014). R^2 value signifies the collective effects of the exogenous latent constructs on the endogenous latent constructs (Hair et al., 2014; Hair et al., 2006, 2010). Therefore, R^2 value of the endogenous construct of the direct relationships model is indicated in Table 4.13.

Even though, the acceptable level of R^2 value depends on the research model, context and area (Hair et al., 2014; Hair et al., 2010), Falk and Miller (1992) suggested that an R^2 value of .10 is acceptable. Similarly, according to Chin (1998) and Hair et al. (2011) R^2 values of 0.75, 0.50 and 0.25 indicated, large, moderate and weak respectively.

Table 4. 13

Variance Explained in the Endogenous Latent Variables

Latent Variables	Variance explained (R^2)
Task Performance	40%
Contextual Performance	29%

Source: Researcher's Estimate based on Survey Data

As presented in Table 4.13, the exogenous latent variables of this study (i.e., RS, TD, CMP, PA and EI) explain 40 percent and 29 percent variance in TP and CP, signifying that the five aspects of HPWPs altogether explain 40% and 29% in the variance of Task and contextual performance respectively. As recommended by Chin (1998), R^2 values explained by the exogenous latent variables on the endogenous latent variable in this study for the direct relationships are considered moderate.

4.9.3 Assessment of the Effect Size

Having assessed the coefficient of determination of the endogenous latent variables, the next criterion is to assess the effect size (f^2) as recommended by Hair, Ringle, and Sarstedt (2013). Effect size is the change in R^2 between the main effects when an individual exogenous latent variable in the model and when it is also removed from the model. This is usually done to evaluate whether the omitted exogenous latent variable has a substantial effect on the endogenous variable (Hair et al., 2013). Therefore, the effect size of exogenous latent variable could be calculated using the formula below (Cohen, 1988; Selya et al., 2012).

$$f^2 = \frac{R^2_{\text{included}} - R^2_{\text{excluded}}}{1 - R^2_{\text{included}}}$$

Where:

f^2 is the value that determines the effect size of exogenous latent construct on the endogenous latent construct. R^2 Included is the R^2 value of the endogenous latent variable before removing a specific exogenous latent variable. On the other hand, R^2 Excluded symbolizes the changes in the R^2 value of the endogenous latent variable after excluding a specific exogenous latent variable from the model. Based on the recommendation of Hair et al., (2013), the above formula, f^2 values of 0.02, 0.15, and 0.35, showed small, moderate, and large respectively (Cohen, 1988). (See Table 4.14 for effect size of all the exogenous latent variables in the direct relationship between IVs and DV.

Table 4. 14

Assessment of the Effect Size f^2 for Direct Relationships between Independent and Dependent Variables.

Constructs (IV)	F^2 (CP)	Effect Size	F^2 (TP)	Effect size
CMP	0.001	None	0.002	None
EI	0.017	Small	0.068	Small
PA	0.004	None	0.007	None
RS	0.001	None	0.004	None
TD	0.127	Small	0.065	Small
WC	0.004	None	0.000	None

Source: Researcher's Estimate based on Survey Data

As presented in Table 4.14 the effects size evaluation of the respective exogenous latent constructs on the endogenous latent construct in the direct relationship between Independent and Dependent Variables, two exogenous latent variables (Training & Development and Employee Involvement) have small significant effect on the endogenous latent construct, while three constructs (Recruitment & Selection, Compensation and Performance Appraisal) have no (none) effect based on the formula of Cohen (1988).

4.9.4 Assessment of Predictive Relevance

Furthermore, having assess the level of the R^2 value of the model and the effect size of all the exogenous latent variables on the endogenous latent variable, it is recommended that scholars should consider evaluating the predictive relevance of the model by evaluating the level of predictive relevance (Q^2) value (Geisser, 1974; Stone, 1974). This condition is an indicator of the predictive relevance of the model (Hair et al., 2014). Also, Duarte et al., (2010) and Stone (1974) suggested that this condition can still be regarded as part of the model assessment in the PLS-SEM analysis. Again, Chin (1998) recommended that Q^2 revealed how well the observed values are formed the model as well as its parameter estimations.

Therefore, blindfolding procedure was employed in the present research and a cross-validated redundancy result was used to observe the predictive relevance (Q^2) of the exogenous latent constructs on the endogenous latent construct (Geisser, 1974; Hair *et al.*, 2014; Hair *et al.*, 2013; Ringle, Sarstedt, & Straub, 2012; Stone, 1974). A model with the Q^2 above zero is assumed to have predictive relevance (Henseler *et al.*, 2009), and therefore the higher the Q^2 the higher the predictive relevance (Duarte & Roposo, 2010). (See Table 4.15).

Table 4. 15

Predictive

Quality Indicators of the Model

DV	$1 - \text{SSE} / \text{SS}$	Q
CP	0.133	
TP	0.223	

Note: SSO (sum of squared observations); SSE (sum of squared prediction errors)

Source: The Researcher

As presented in Table 4.15, the result from blindfolding assessment shows that cross-validated redundancy (Q^2) is higher than zero. Thus, this indicated that the model has predictive relevance (Chin, 1998; Hair *et al.*, 2014; Hayes, 2009).

4.10 Testing Moderating Effects

As explained by Hair *et al.* (2013), when the effect of an exogenous variable on an endogenous variable is evident on the values of another variable, then, there is existence of moderating effect in which such variable moderates the relationship between the two variables (i.e. exogenous and endogenous variables).

In the current study, physical working condition was proposed to moderate the relationship among the five aspects of HPWPs (recruitment & selection, compensation, performance appraisal training & development and employee involvement,), task and

contextual performance, covering hypotheses 6-10. Specifically, for achieving a profound insight and promoting the field of knowledge, the hypothetical statements were explained as follows:

H6a: Physical working condition moderates the relationship between recruitment and selection and task performance

H6b: Physical working condition moderates the relationship between recruitment and selection and contextual performance.

H7a: Physical working condition moderates the relationship between training and development and task performance

H7b: Physical working condition moderates the relationship between training and development and contextual performance

H8a: Physical working condition moderates the relationship between compensation and task performance

H8b: Physical working condition moderates the relationship between compensation and contextual performance

H9a: Physical working condition moderates the relationship between performance appraisal and task performance

H9b: Physical working condition moderates the relationship between performance appraisal and task performance

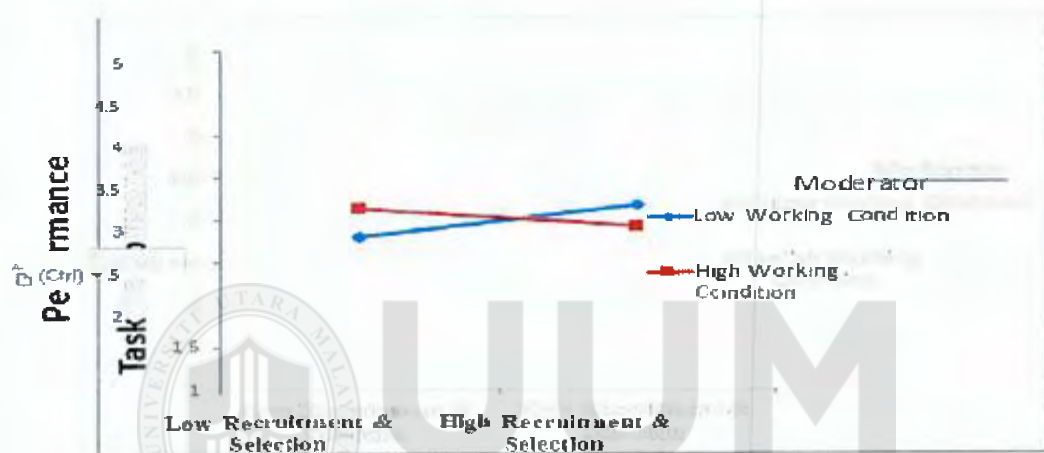
H10a: Physical working condition moderates the relationship between employee involvement and contextual performance

H10b: Physical working condition moderates the relationship between employee involvement and contextual performance.

Product indicator approach (Chin et al., 2003; Helm, Eggert, & Garnefeld, 2010; Henseler & Chin, 2010a; Henseler & Fassott, 2010b) was adopted in this study, given that it is considered equal or better than the group comparison approaches (Henseler & Fassott, 2010a) for testing moderation with continuous moderating variable (Rigdon, Schumacker, & Wothke, 1998). Based on Table 4.12 and Figure 4.4, it can be discerned that hypothesis 6a, 9a, and 10a were supported as the result ($\beta = -0.147$, $t = 2.562$, $p < 0.05$; $\beta = -0.117$, $t = 1.734$, $p < 0.05$; $\beta = 0.226$, $t = 5.366$, $p < 0.01$) shows that that physical working condition moderates the relationship between recruitment and selection, performance appraisal, and employee involvement and task performance respectively. Also, Figure 4.5, 4.8, and 4.10, which represent HPWS variables (recruitment and selection, performance appraisal, and employee involvement) interaction plot (Dawson, 2014), signify that physical working condition moderates the link between recruitment and selection, performance appraisal, and employee involvement and task performance.

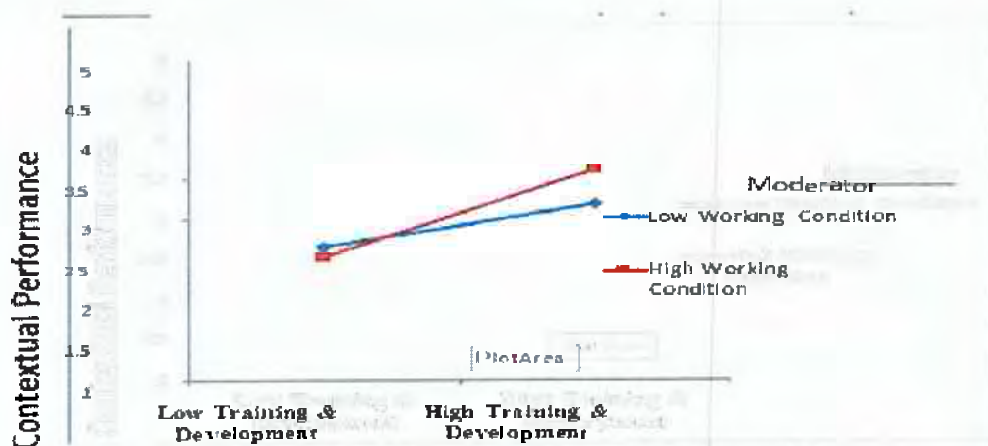
Furthermore, hypothesis 7b, 8b, 9b, and 10b were also supported, given that the result ($\beta = 0.136$, $t = 2.704$, $p < 0.05$; $\beta = 0.149$, $t = 1.909$, $p < 0.05$; $\beta = -0.175$, $t = 2.676$, $p < 0.01$; $\beta = 0.131$, $t = 2.678$, $p < 0.01$) signifies that physical working condition moderates the relationships between training and development, compensation, performance appraisal, and employee involvement and contextual performance respectively. In addition, Figure 4.6, 4.7, 4.9, and 4.11, which represent HPWPs variables (training and development, compensation, performance appraisal, and employee involvement) interaction plot (Dawson, 2014), signify that physical working condition moderates the relationship between training and development, compensation, performance appraisal, and employee involvement and contextual performance. On the other hand, as depicted in Table 4.12

and Figure 4.4, hypothesis 6b, 7a, and 8a were not supported ($\beta=-0.095$, $t=1.263$, $p>0.05$; $\beta=0.066$, $t=1.511$, $p<0.05$; $\beta=0.102$, $t=1.529$, $p<0.05$) respectively. This result indicates that physical working condition does not moderate the relationship between recruitment and selection and contextual performance, and between training and development and compensation and task performance.



Working Condition dampens the positive relationship between Recruitment & Selection and Task Performance .

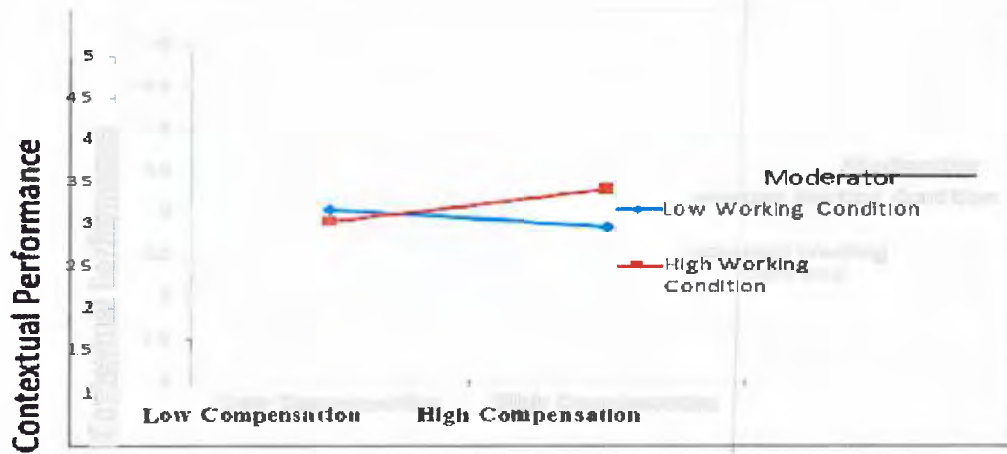
Figure 4. 5
WC-RS Interaction Effect on Task Performance.



Working Condition strengthens the positive relationship between Training & Development and Contextual Performance .

Figure 4. 6

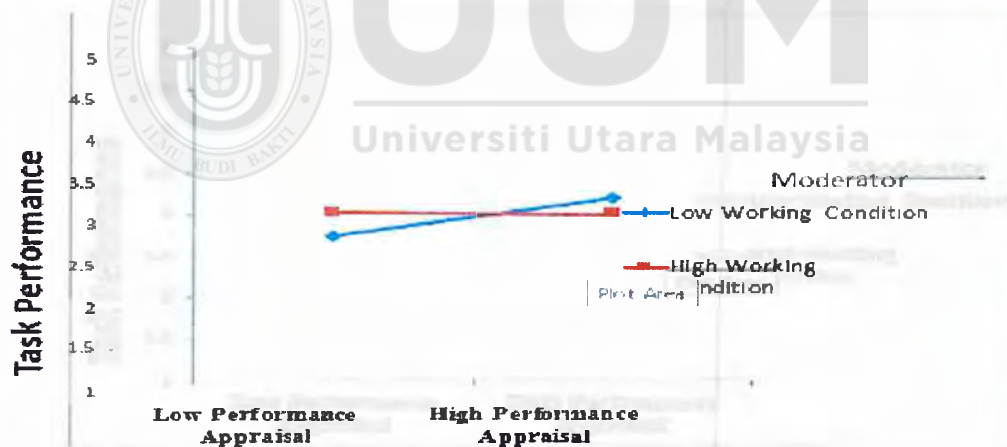
WC-TD Interaction Effect on Contextual Performance



Working Condition strengthens the positive relationship between Compensation and Contextual Performance

Figure 4. 7

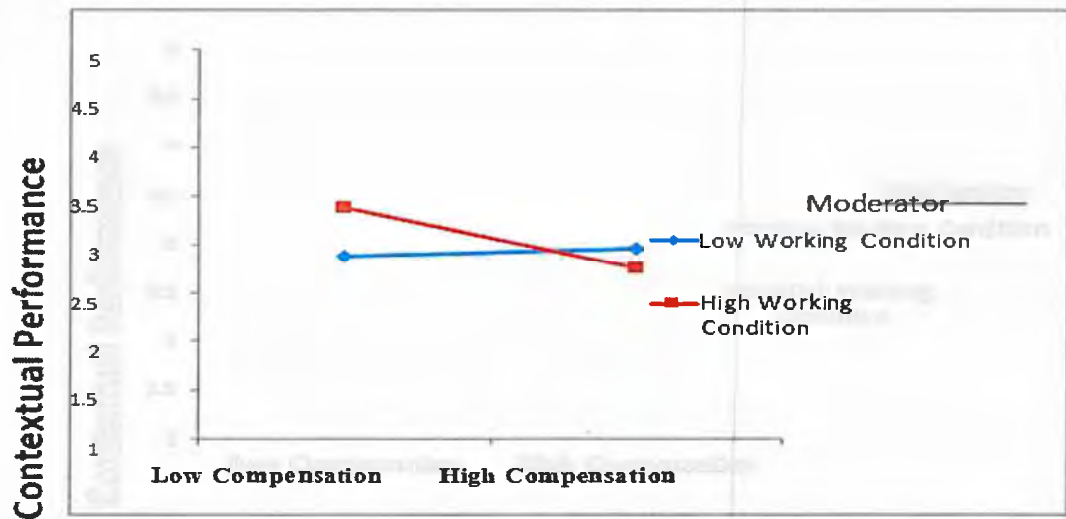
WC-CMP Interaction Effect on Contextual Performance



Working Condition dampens the positive relationship between Performance Appraisal and Task Performance

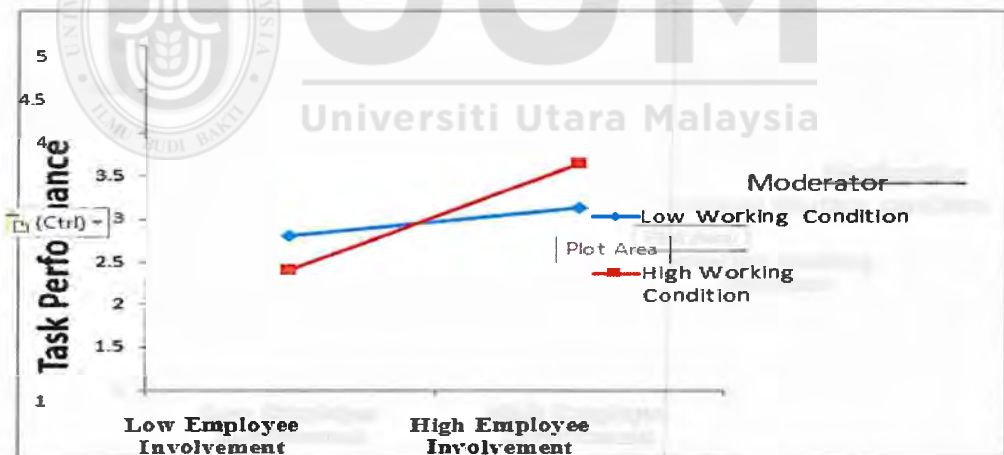
Figure 4. 8

WC-PA Interaction Effect on Task Performance



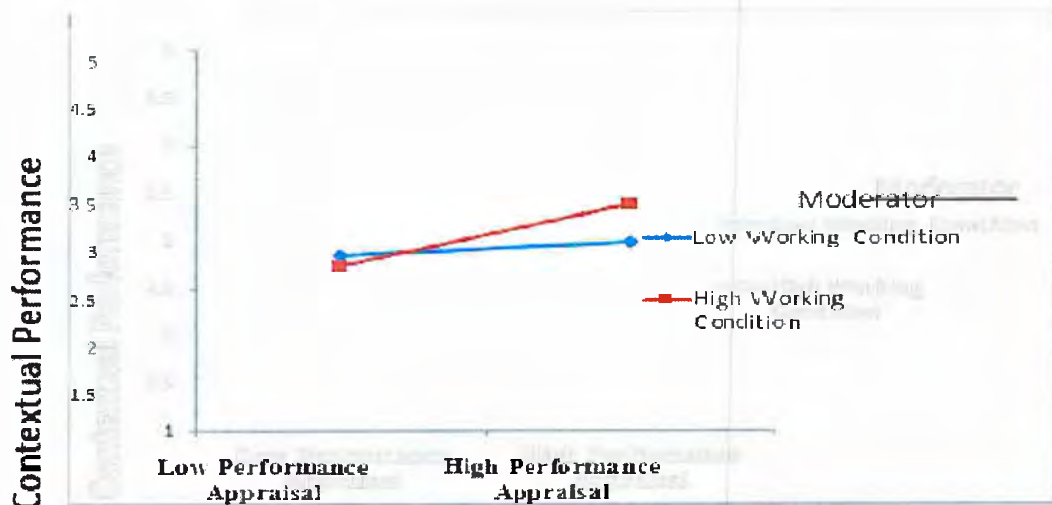
Working Condition strengthens the negative relationship between Compensation and Contextual Performance .

Figure 4. 9
WC-PA Interaction Effect on Contextual Performance



Working Condition strengthens the positive relationship between Employee Involvement and Task Performance .

Figure 4. 10
WC- EI Interaction Effect on Task Performance



Working Condition strengthens the positive relationship between Performance Appraisal and Contextual Performance.

Figure 4. 11

WC-EI Interaction Effect on Contextual Performance

4.11 Summary of Hypotheses' Results

Therefore, out of 20 hypotheses, thirteen hypotheses were supported while seven of the remaining hypotheses were not supported. Hence, the summary of hypotheses results is shown in the table below:

Table 4. 16

Hypotheses' Summary

Hypotheses	Hypothesized Path	Decision
Direct Relationships		
H1a	RS-> TP	Not Supported
H1b	RS-> CP	Not Supported
H2a	TD-> TP	Supported
H2b	TD-> CP	Supported
H3a	CMP-> CP	Not Supported
H3b	CMP-> TP	Not Supported
H4a	PA-> TP	Supported
H4b	PA-> CP	Supported
H5a	EI-> CP	Supported
H 5 b	E I-> T P	Supported

Moderating Effects		
H6a	RS* WC->TP	Supported
H6b	RS* WC->CP	Not Supported
H7a	TD* WC->TP	Not Supported
H7b	TD* WC->CP	Supported
H8a	CMP* WC->TP	Not Supported
H8b	CMP* WC->CP	Supported
H9a	PA* WC->TP	Supported
H9b	PA* WC->CP	Supported
H10a	EI* WC->TP	Supported
H10b	EI* WC->CP	Supported

Source: Researcher's Estimate based on Survey Data

4.12 Summary of the Chapter

Overall, data analysis bordering on initial data screening and preliminary analysis, descriptive analysis, and inferential analysis using both SPSS version 21 and Smart PLS 3 software were conducted. The results of the analysis showed that out of twenty (20) proposed hypotheses, thirteen (13) hypotheses were supported while the remaining seven (7) hypotheses were not supported.

CHAPTER FIVE

DISCUSSIONS, RECOMMENDATIONS AND CONCLUSIONS

5.1 Introduction

The analysis and findings of the present study were presented in the preceding chapter. This chapter presented discussion of the findings and also results in the earlier chapter. Following this, theoretical and practical implications of the research, limitations of the research and recommendations for future research were too presented. Finally, the chapter presented the conclusion of the research.

5.2 Recapitulation of the Study

The major aim of the present research was to investigate the link between HPWPs, physical working condition and job performance (task and contextual). It examined the moderating effect of physical working condition (WC) on the link between the five selected HPWPs (i.e. training and development (TD), employee involvement (EI), compensation (CMP), performance appraisal (PA), and recruitment and selection (RS) and job performance (JP). Data were gathered from North West Nigerian Polytechnic with lecturers as respondents. 722 questionnaires were distributed and 546 (75.6%) were returned. However, only 539 (74%) was used for the analysis. Both SPSS 22v and PLS-SEM 3.2.6v were used for the analyses.

In examining the first objective, which aimed at investigating the effect of HPWPs (RS, TD, CMP, PA & EI) on job performance (task & contextual performance), ten (10) hypotheses were formulated and tested. The statistical results indicated that six hypotheses were supported and the remaining four were not supported as there were no

statistical evidences to support them. Likewise, the second objective determined the moderating effect of physical working condition on the link between HPWPs (RS, TD, CMP, PA & EI) and job performance (task & contextual performance). Ten (10) hypotheses H6a, H6b, H7a, H7b, H8a, H8b, H9a, H9b, H10a and H10b were similarly formulated and tested. The results indicated that seven hypotheses were supported and the remaining three hypotheses were not supported. In general, out of the 20 hypotheses in the research, 13 hypotheses were supported while the remaining seven hypotheses were not supported.

5.3 Discussions of the Findings

In this section of the study, research findings were presented and discussed. From the two objectives of the study, 20 hypotheses were formulated. These are presented below:

Table 5. I
Research Objectives and their corresponding hypotheses

SN	Objectives	H	Hypotheses	Implication of findings
1.	To examine the effect of HPWPs on job performance.	1a	Recruitment and selection have a significant effect on task performance.	This implies that this study confirms all hypotheses are proven to have significant effects on both the contextual and task performance. In essence, HPWPs significantly influence both the contextual and task performance
		1b	Recruitment and selection have a significant effect on contextual performance.	
		2a	Training and development have a significant effect on task performance.	
		2b	Training and development have a significant effect on contextual performance.	
		3a	Compensation has a significant effect on task performance.	

		3b	Compensation has a significant effect on contextual performance.	
		4a	Performance appraisal has a significant effect on task performance.	
		4b	Performance appraisal has a significant effect on contextual performance.	
		5a	Employee involvement has a significant effect on task performance.	
		5b	Employee involvement has a significant effect on contextual performance.	
2.	To determine whether physical working condition moderates the relationship between HPWPs and Job performance	6a	Physical working condition moderates the relationship between recruitment and selection, and task performance.	The implication here is that physical working condition is a good moderator of the relationship among HPWP's and both the contextual and task performance
		6b	Physical working condition moderates the relationship between recruitment and selection, and contextual performance.	
		7a	Physical working condition moderates the relationship between training and development, and task performance.	
		7b	Physical working condition moderates the relationship between training and development, and contextual performance.	
		8a	Physical working condition moderates the relationship between compensation and task performance.	
		8b	Physical working condition moderates the relationship between compensation and contextual performance	

- 9a Physical working condition moderates the relationship between performance appraisal and task performance
- 9b Physical working condition moderates the relationship between performance appraisal and contextual performance.
- 10a Physical working condition moderates the relationship between employee involvement and task performance.
- 10b Physical working condition moderates the relationship between employee involvement and contextual performance.

Following in the subsections presented, direct paths and moderating paths are presented as follows:

5.3.1 Testing the Direct Effects of HPWPs on Job Performance (Direct Paths)

5.3.1.1 The Effect of Recruitment and Selection on Task Performance

The first objective of this study states thus: "To examine the effect of HPWPs on job performance". To achieve this objective, ten hypotheses were developed. The first hypothesis (H1a) reads: Recruitment and selection has a significant effect on task job performance, indicating a linear causal link between recruitment and selection, and task performance. The hypothesis was tested via Variance-Based SEM (i.e. PLS-SEM).

Based on the result obtained from the PLS-SEM output ($\beta=0.037$, $t=0.540$, $p>0.10$), Hypothesis (H1a) was not supported. Therefore, the findings signify that though positive

link exists between recruitment & selection and task performance, but the link is not significant. This result however, contradicts some existing empirical studies including Zirra, Ogbu, and Ojo, (2017); Karia, Omari, Mwanaongoro, Ondieki, (2016); Al-Quadah et al. (2014); Saleem and Khurshid (2014); Tabiu and Nura, (2013).

Although the extant literature (e.g., Taylor, Levy, Boyacigiller, & Beechler, 2008; Takeuchi, Lepak, Wang, & Takeuchi, 2007) has indicated that recruitment and selection can induce levels of employee commitment and consequently would result in higher overall performance, yet, the findings of the current research signifies that recruitment and selection are not predictors of enhanced task performance of the Nigerian polytechnic lecturers.

In addition, non-significant relationship between recruitment and selection and job performance could be traced to the demographic pattern of the respondents. The numbers of male lecturers are far above their female counterparts. This might be related to gender bias in the hiring system of the polytechnics in Nigeria. Therefore, the respondents do not 'agree much' on the recruitment and selections' relationship with job task performance. Likewise, looking at the years of service of the respondents, most of the respondents spent more than 10 years in service, indicating that they might not be quite familiar with the recruitment and selection exercise in their institutions, and the recruitment & selection exercise has no significant connection with their job task performance. In short, this finding signifies that demographic pattern of the respondents could affect the link between recruitment and selection and job task performance.

According to Yaro (2014), sentiment and other primitive issues like favoritism, ethnicity and nepotism are entrenched in the hiring process in the public institutions. This led to

unfavorable labor turnover and high costs of governance. Again, the major challenges detected are constant political interference which manifested out of the desire of the politicians to get their relatives in the service; recruitment purely based on skills rather than good attitude and the principle of federal character that further compounded the problem in the form of ethnic balancing.

5.3.1.2 The Effect of Recruitment and Selection on Contextual Performance

Hypothesis (H1b) which was coined from the first objective reads: recruitment and selection has a significant effect on contextual performance. The hypothesis was tested via Variance-Based SEM (i.e. PLS-SEM), but it was also not supported as the result shows non-significant influence of recruitment and selection on contextual performance ($\beta=0.003$, $t=0.043$, $p>0.10$).

This result is similar with the result above and thus same reason applies. Given the defective hiring process in the public institutions, recruitment and selection will not even enhance task performance of the employees not to talk of contextual performance. In the study conducted by Collins (2008), it is found that it is more challenging for the public sector to recruit qualified personnel than the private sector, rather, if the public sector can encourage retention and training to influence their comparative advantage in recruiting employees with work ethic, the problem could be solved.

As indicated previously, the respondents of the current study might perceive gender bias in the recruitment and selection exercise in their respective institutions, indicating non-significant relationship between recruitment and selection and job contextual performance. Politicization, nepotism, patronage and instability in public organizations particularly state owned institutions such as the polytechnics and colleges of education;

undermine the aspired success of a recruitment exercise (Rahmany, 2018). Male lecturers outnumbered their female counterparts. This implies that the respondents might feel gender bias and perceive that the recruitment and selection exercise has no significant connection with their job contextual performance. In the same vein, the demographic information on the years of service of the respondents indicates that majority of the respondents have spent more than a decade in the service. They do not feel the impact of recruitment and selection exercise any longer. This could enable the claim that recruitment and selection exercise cannot stimulate the lecturers to helping and cooperating with other employees in the organization and voluntarily performing task activities that are not part of the employees assigned responsibilities like coaching newcomers; supporting organizational objectives; demonstrating efforts and showing initiatives, and thus non-significant link between recruitment and selection and job contextual performance.

Overall, in this research, recruitment and selection are not found to be determinants of enhanced task and contextual performance. This could be linked to defective hiring system in the Nigerian polytechnics. It is therefore proposed that the hiring system in Nigerian polytechnics should be reformed and made merit-based and fair. Nigerian Public Service should lay more emphasis on meritocracy irrespective of applicant's background and/or affiliation and the problem of political barrier should be brought to an end, because this would improve employee commitment and therefore result in higher overall performance (Taylor, Levy, Boyacigiller, & Beechler, 2008; Takeuchi, Lepak, Wang, & Takeuchi, 2007).

5.3.1.3 The Effect of Training and Development on Task Performance

With regards hypothesis (H2a), as developed from the first objective, the PLS path modelling results indicated that training and development has a significant influence on task Performance ($\beta=0.251$, $t=5.546$, $p<0.001$). These points out that the more training the lecturers undergo the more efficient they are on their jobs. This result concurs with findings of Faridi, Baloch, and Wajidi (2017); Faizan and Zehra (2016); Imran and Tanveer (2015); Falola, Osibanjo, and Ojo (2014); Issahaku, Ahmed, and Bewa-Erini (2014); Amina et al. (2013).

The finding also indicates that training and development can be designed to enhance worker's skills, and competencies that are required for the performance of present and future tasks, which will in turn improve task performance of the employees. Because an enhanced performance is attainable if training and development are given due priority in the organization so that employees would have the opportunity to obtain new skills (Ulrich, 1997). In a related scenario, Ryan and Deci, (2000), also argued that Training workers can improve creativity by boosting employees' feeling of competence and consequently giving rise to greater intrinsic motivation.

5.3.1.4 The Effect of Training and Development on Contextual Performance

Going by the result got from the PLS path modelling, hypothesis (H2b), which state that training and development have a significant effect on contextual performance, was supported ($\beta=0.409$, $t=7.655$, $p<0.001$). Thus, if training and development are increased by one-unit, contextual performance will increase by 40.9 units. This finding however explained that allowing employees to undergo required training in an organization can improve their contextual performance. This means the more the lecturers in the Northwest

Nigeria polytechnic receive the needed training, the higher their contextual performance (i.e. performance outside their job description but yet boost organizational effectiveness).

Also, this finding suggests that investing on the right kinds of employee's training in an organization can be an important way of enhancing positive employee performance, signifying that the lecturers perceive that the more they get training the more efficient they become on their jobs, this result corresponds to the findings of Hafeez, 2015; Faiola, Osibanjo, & Ojo, 2014; Issahaku, Ahmed, & Bewa-Erini, 2014; Amina et al., 2013; Khan, 2012; Jagero, 2012; Munjuri, 2011; Marwat, 2010).

As suggested by Basam (2015), for long as training becomes a most important method or way to enhance employee performance, training activities contribute to improve employee knowledge, capabilities, skills and attitude because trained employees perform creditably well than untrained employees. This result is corroborates to the findings of the earlier studies (e.g., Imran, & Tanveer, 2015; Basam, 2015; Falola, Osibanjo, & Ojo, 2014; Khan, Nawaz, Aleem, & Hamed, 2012).

Contextual job performance, which involves non-formal work behaviors such as helping and cooperating with other employees in the organization and voluntarily performing task activities that are not part of the employees assigned responsibilities like coaching newcomers; supporting organizational objectives; demonstrating efforts and showing initiatives, requires some specific training programs.

Overall, the present study adds more insights to the existing literature in that training and development is an important predictor of both task and contextual performance. Through training and development, employee performance gets enhanced, given that training activities enhance employee capabilities, skills, knowledge and attitude.

5.3.1.5 The Effect of Compensation on Task Performance

In contrary to hypothesis (H3a) which stated earlier that compensation has a significant influence on task performance, the result obtained from PLS path modelling indicated a non-significant link between compensation and task performance ($\beta = -0.104$, $t = 1.621$, $p > 0.050$) Hence, H3a was not supported. This finding is inconsistent with the previous studies of Ismail et al., (2018) and Shilongo (2013). According to the two studies, performance and compensation of whatever pattern are connected, and the influence of compensation on the performance of employees and overall organizational performance is significantly positive. Though, the result of the present study contradicts a number of scholarly arguments, such as Ismail et al., (2018) and Shilongo (2013), it finds support in the works of Deci and Ryan's (1980) and (Deming, 1986) who believe that at times, compensation stimulates unwanted employee competition.

Another possible reason for this result could be related with the poor remuneration of the lecturers in Nigeria. It is common knowledge that lecturers are poorly compensated compared to their contemporaries in other countries. This scenario has led to incessant industrial strikes engaged in by the lecturers in their agitation for increment in their pay. In fact, due to this poor compensation, some lecturers engage in some menial jobs to beef up their earnings. In a similar fashion, De Cieri and Kramar (2008) argued, that a high level of pay and/or benefit relative to that of competitors ensure organization attracts and retains high-quality employees. They further discussed that pay may be one way workers measure whether the time they spent and the efforts they put into working are worthwhile (Ryan & Sagas, 2009). The pay system affects the quality of work and the willingness to be flexible and learn new skills (Milkovich, Gerhart, & Hannon, 1991) This has been reported to have adversely affected

their performances. With this result, it could be highlighted that compensation may not necessarily improve performance, unless the reward system is considered fair. This, according to expectancy theory and equity theory, indicates that employees will be motivated, if they receive fair compensation for the work they do compared to other colleagues (Adams, 1965; Ali & Mohsen, 2008).

In addition to the fact that lecturers are poorly compensated compared to their colleagues in other countries, majority of the respondents are not only male who have more responsibilities but also hold higher degrees (Master and PhD) and of many years working experience. This kind of population would never be pleased with poor compensation and thus the non-significant link between compensation and job task performance. The experienced employees with higher degrees would like to earn higher compensation, but if they are poorly paid, there would be demotivated, and the consequence is poor task performance.

Empirically, internal equity pay structures on employees' performances are very important approach to compensation (e.g. Bloom, 1999; Cowherd and Levine, 1992; Evan and Simmons, 1969; Heyman, 2005; Pfeffer and Langton, 1993; Trevor et al., 2012). However, external equity is equally important because it allows organizations to compare their compensation policies across organizations in the same industry or in the same labor market.

5.3.1.6 The Effect of Compensation on Contextual Performance

In line with the result obtained from the PLS path modelling, it is discovered that compensation failed to be significantly correlated with contextual performance ($\beta=0.047$, $t=0.576$, $p>0.10$). Thus, hypothesis (H3b), which stated that compensation has a

significant influence on contextual performance, was not supported. Hence, the result of this finding showed that lecturers' compensation level in the Northwestern Nigeria polytechnics has no significant influence on their contextual performance (i.e., performance outside their job description).

As indicated in the previous section, poor compensation of the lecturers in Nigeria might have responsible for demotivation of the lecturers. Poor compensation is a demotivator while the effective reward system is a motivator and performance-enhancer. According to Ismail, Abdul Majid, and Joarder (2018), employees would be motivated and thus enhance their productivity, and positive attitudinal and behavioral outcomes will be accomplished as this will encourage employees to support the organizational and human resource department strategies and goals in the organization. Consequent upon higher employee productivity and performance, there would be higher organizational performance which is the sole objective of every organization. Therefore, with this finding, organizations, particularly the polytechnics, should entrench effective reward system which will enhance employee performance.

Similar to the discussion in the prior section, the lecturers with higher degrees and many years of experience would aspire for good compensation, but in the case of poor compensation, they would be demotivated to perform extra role and involve in non-formal work behaviors such as helping and collaborating with other employees in the organization and voluntarily performing task activities that are not part of the employees assigned responsibilities. Research has identified contextual performance of employee to be connected with the motivation induced by good compensation. So, the non-significant

link between compensation and lecturers' contextual performance could be linked to the demographic pattern of the respondents of the current research.

Generally, the finding of the current research enriches the existing body knowledge in that compensation does not absolutely enhance both task and contextual performance of the lecturers. There can be some other variables that could moderate or mediate the link between compensation and performance.

A focus should be both on the external and the internal context of pay structures. Even though At the empirical level, extant literature seems to support the importance of external equity by demonstrating its influence which are even more than internal equity on employees' pay satisfaction and performances (e.g. Brown, 2001; Dornstein, 1988; Ronen, 1986), and suggesting that external equity can compensate for the negative effects of internal inequity (e.g. Bloom and Michel, 2002; Brown et al., 2003).

5.3.1.7 The Effect of Performance Appraisal on Task Performance

Going by the result obtained from the PLS path modelling, hypothesis (H4a), which states that performance appraisal has a significant effect on task performance, was supported ($\beta=0.112$, $t=1.725$, $p<0.050$). The finding shows that performance appraisal is a strong and positive predictor of employee task performance. This result is consistent with the findings of Ismail et al., (2019), Dauda (2018); Hassan (2016); Arabia, et. al. (2014); Mir and Ahmed (2014); Owoyemi and George (2013); Ojokuku (2013); Nadarasa (2013); Singh, et. al., (2010) and Daoanis (2012).

With this finding, it can be asserted that performance appraisal is an important practice, given the fact that it can align both individual and team performance with organizational

strategies (Zhang & Li, 2009). Also, performance appraisal consist of frequent feedback based on team and organization goals, managing aims and objectives that are tied to organizational strategies so that it could improve individual task performance.

With the result of this research which shows that performance appraisal, particularly, competency-based performance appraisal, it could be asserted that performance appraisal is a crucial tool via which employees performance are developed, stimulated, gauged and defined (DeNisi & Pritchard, 2006). Performance appraisal enhances employee performance by stimulating creative behaviors on the side of an employee, because the employee is aware that behaviors are evaluated and connected to performance. Additionally, performance appraisal exercise determines and encourages promotions, transfers, rewards, incentives, training, demotions and even stagnations (Okoye, Mbagwu, Abanum & Nwohiri, 2019). Also, performance appraisal has the ability to stimulate job performance when it is used accordingly (Arik & Kato, 2010). On the other hand, it could stimulate negative attitude when it is not conscientiously implemented (Evans, 2012; Arik & Kato, 2010; Okoye et al. 2019).

Furthermore, the findings of this study could be said to have signified that for the high-performing organizations, a competency-based performance appraisal system is important in that it can be used to better motivate the employees, align training with organizational goals and objectives, clearly define the roles and skills required to perform each job well, and optimize the hiring process. Competency-based performance appraisal can increase the performance of the employees, as indicated by the finding of this research, given that it allows effective communication of 'why', 'what', 'when', and 'how' of the goals, targets, and tasks expected of the employees are accomplished. It also allows definition

of job types, identification of skill gaps, coaching and development, monitoring, documenting and assessments.

5.3.1.8 The Effect of Performance Appraisal on Contextual Performance

In consistent with the result obtained in this study, it is discovered that performance appraisal has significant effect on contextual performance ($\beta=-0.132$, $t=1.695$, $p<0.050$).

Thus, hypothesis (H4b), which states that performance appraisal has a significant positive effect on contextual performance, was supported. Specifically, the negative relationship demonstrated in the relationship might be as a result of bias and ineffectiveness in the way employee performance appraisal is being carried out in the Nigerian public institutions.

This finding is inconsistent with the previous finding which signifies a significant positive link between performance appraisal and task performance of the employees. This explains that the Nigerian lecturers are aware that their task performances are tied to appraisal which could determine payment of their salaries and promotion. The lecturers know that if their evaluation is to be poor, they may lose their salaries or denied of promotion. Therefore, this makes them ensure they meet up with the key performance indicators (KPI). Performance appraisal process is not encouraging and motivating enough to improve their contextual performance.

5.3.1.9 The Effect of Employee Involvement on Task Performance

Hypothesis (H5a), which reads: employee involvement has a significant effect on task performance was tested, and the result obtained from the PLS path modelling ($\beta=-0.394$, $t=6.870$, $p<0.001$) signifies H5a was supported. The result shows that a significant link

exists between employee involvement and task performance. This means, employee involvement is a robust predictor of task performance. This finding finds support in the findings of Sendawula (2018); Hassan (2016); Khatoon (2014); Ali and Rizwan (2013); Tabiu and Nura (2013); and Nadarasa (2013).

This finding indicates that employee involvement practice can guarantee employees' ability to express their ideas in communication about how organizational objectives can be accomplished. Employee involvement facilitates employees' understanding regarding how job contributes to the organization's goal accomplishment. In addition, having information exchange mechanisms will enrich worker's job-related knowledge and also will inspire employees to use their domain-relevant and creativity-relevant skills to propose developments and create new ideas. This will in turn translate to employee task performance.

The finding accentuates the fact that employee participation could have a strong connection with their ability to perform a task. If an employee is involved, he/she tends to get strongly encouraged. Again, the higher the level of involvement, the more performing the employees become in accomplishing the given task. This finding concurs with McShane and Von Glinow (2003) who stressed that employee participation has become a significant component of corporate decision-making and a fundamental part of knowledge management.

5.3.1.10 The Effect of Employee Involvement on Contextual Performance

Like the previous finding, hypothesis (H5b) which indicates employee involvement has a significant effect on contextual performance was also supported as the result obtained

from the PLS path modelling ($\beta=0.196$, $t=3.084$, $p<0.001$) shows a significant positive relationship between employee involvement and employee contextual performance. Lecturers' participation in problem solving and decision making, give them a sense of belonging and make them more committed to both task and contextual performance. Thus, this finding is in consistent with the results of (Jackline & Makori, 2018; Mildred, 2016; Wainaina, Iravo, & Waititu, 2014; Amah, 2013).

If an employee is requested to perform a task, there should be an instruction given to the concerned employee. But, if the performance of the organization is to be accomplished, there is a need for employee involvement in the organizational strategic planning and the strategies designed to accomplish the organizational goals and objectives. Workers should be equipped with financial and strategic information of the firm to improve and enrich workers' job-related knowledge.

The findings of this study underscore the importance of employee involvement. Employee involvement creates a sense of ownership and responsibility for the employees. Consequently, out of this sense of ownership grows a greater commitment to the organization and an increased capacity for autonomy. When there is involvement, employees have some levels of authority in making decisions that were not previously within their mandate. It has been posited that employee involvement extends beyond controlling resources for one's own job; it includes the power to influence decisions in the work unit and organization, and it requires sharing information and knowledge, because employees require more knowledge to make a meaningful contribution to the decision process (McShane & Von Glinow, 2003).

5.3.2 Testing Moderating Effects of Physical Working Condition on HPWPs-Job Performance Relationship

To accomplish the objective two of this moderation research, which reads: To determine whether physical working condition moderates the link between HPWPs and job performance, the following hypotheses were formulated:

- Physical working condition moderates the relationship between recruitment and selection, and task performance.
- Physical working condition moderates the relationship between recruitment and selection, and contextual performance.
- Physical working condition moderates the relationship between training and development, and task performance.
- Physical working condition moderates the relationship between training and development, and contextual performance.
- Physical working condition moderates the relationship between compensation and task performance.
- Physical working condition moderates the relationship between compensation and contextual performance.
- Physical working condition moderates the relationship between performance appraisal and task performance.
- Physical working condition moderates the relationship between performance appraisal and contextual performance.
- Physical working condition moderates the relationship between employee involvement and task performance.

- Physical working condition moderates the relationship between employee involvement and contextual performance.

The hypotheses were subjected to testing through PLS-SEM-based structural model evaluation and bootstrapping moderation analysis procedure. These are discussed under the following subsections:

5.3.2.1 Moderating Effect of Physical working condition on the relationship between Recruitment and Selection and Task Performance

Hypothesis (H6a) formulated from the objective 2 signifies that physical working condition is expected to moderate the relationship between recruitment and selection, and task performance. This hypothesis was supported, given the result obtained from the product term approach for the estimation of the moderation and moderating effects ($\beta = -0.147$, $t = 2.562$, $p < 0.005$) and the interaction plot shown in the previous chapter. This result signifies that physical working condition moderates the relationship between recruitment and selection, and task performance, indicating that physical working condition strengthens the link between recruitment and selection, and task performance but in a negative direction.

This result indicates that physical working condition does not positively strengthen the effectiveness of the relationship between recruitment and selection and employee task performance in the Nigerian polytechnics. While no research is found to have investigated the moderating effect of physical working condition on HRM-performance connection, the finding of this research is consistent with the few available studies (e.g., Chen, Ployhart, Thomas, Anderson & Bliese, 2011; Kim-Soon, Ahmad, & Ahmad, 2014), which

confirm the moderating influence of physical working condition on the link between other predictors (e.g., conscientiousness, extraversion) and performance.

Nevertheless, this finding is very unique and fortifies the contingency theory's supposition that the context in which the organizations function matters most; thus, this assumption could entail to the application of HR practices because HR practices can be helpful or destructive because success or failure of HR practices depends on external and internal boundary conditions, and the environment in which organization operates determines to a large extent the HR practices and policies (Chadwick et al., 2013; Teo et al., 2011).

Overall, although physical working condition moderates the link between recruitment and selection, and task performance, the implication of the result is that physical working condition moderated the relationship negatively because physical working condition is not conducive enough for effective learning and teaching in Nigeria, and recruitment and selection couldn't induce task performance, given the unfair recruitment and selection processes in Nigerian public hiring system. The process is characterized with many malpractices such as favoritism, partiality, and unfairness. Hiring process in the public institutions is not merit-based.

5.3.2.2 Moderating Effect of Physical Working Condition on the relationship between Recruitment and Selection and Contextual Performance

Hypothesis (H6b) formulated from the objective 2 signifies that physical working condition is expected to moderate the relationship between recruitment and selection, and contextual performance. This hypothesis was not supported, given the result obtained

from the product term approach for the estimation of the moderation and moderating effects ($\beta = -0.095$, $t = 1.263$, $p > 0.10$). This result signifies that physical working condition does not moderate the link between recruitment and selection, and contextual performance, indicating that physical working condition do not strengthen the link between recruitment and selection, and contextual performance.

This result implies that the negative relationship between recruitment and selection and employee contextual performance will not be stronger for polytechnics with good physical working condition. Possible justification for this result can be that physical working condition might not be relevant in a scenario where recruitment and selection couldn't enhance task performance as in the case of the polytechnic lecturers in Nigeria. This has been attributed to the unfair recruitment and selection processes in Nigerian public hiring system, which is held to be characterized with many malpractices such as favouritism, partiality, and unfairness.

In addition, physical working condition was revealed to be insignificant in the context of recruitment and selection-job performance connection in the Nigerian polytechnics. This might be due to the demographic pattern of the respondents, that shows most of the respondents have spent more than 10 years in the service, indicating that they might not be familiar with the recruitment and selection exercise in their institutions. Because in some of the Nigerian polytechnics, recruitment and selection exercises are met with a lot of interferences from the Ministry or Cabinet Office, and the Rector might not even aware of it.

5.3.2.3 Moderating Effect of Physical Working Condition on the relationship between Training and Development and Task Performance

Hypothesis (H7a) which indicates that physical working condition moderates the relationship between training and development, and task performance was not supported, given the results obtained from the product term approach for the estimation of the moderation and moderating effects ($\beta=0.066$, $t=1.511$, $p>0.10$). This result indicated that physical working condition failed to moderate the link between training and development, and task performance. As such, physical working condition is unable to improve the link between training and development, and task performance and this unique revelation is also contrary to the expectation of the study. This result is in contrary to some previous researches such as Okechukwu (2017), Muhammad and Faruq (2017) and Chiang and Birch (2010).

In the context of this study, physical working condition seems to be irrelevant to either strengthen or weaken the significant positive effect that training & development has on task performance of the lecturers. The reason could be linked to the fact that the polytechnic lecturers believe that the important thing is for the government to invest on the right types of training in their respective institutions, and the training and developmental programs are tailored to enhancing their task performances. Also, these lecturers perceive that the more relevant training they undergo the more efficient they are on their jobs.

This finding could also be interpreted to indicate how irrelevant physical working condition is when training and development is designed to increase employee's competencies and skills necessary for the performance of present and future tasks, because

an enhanced performance is possible, if training and development are given superiority in the organization so that employees can have the chance to obtain new skills (Ulrich, 1997).

5.3.2.4 Moderating Effect of Physical Working Condition on the relationship between Training and Development and Contextual Performance

Hypothesis (H7b) was supported, given the result obtained from the product term approach for the estimation of the moderation and moderating effects ($\beta=0.136$, $t=2.704$, $p<0.050$). This result signifies that physical working condition significantly moderates the relationship between Training and Development and contextual performance. This signifies that if a good physical working condition interacts with training and development, and the level of training and development would further increase thereby enhancing further contextual performance of lecturers. This result shares some similarities with some of the existing studies (e.g., Manzoor, Wei, Banyal, Nurunnabi & Subhan, 2019; Aybas, 2015; Chen, Ploy hart, Thomas, Anderson & Bliese, 2011).

This result also implies that indicating that physical working condition strengthens the link between training & development and task performance. The positive influence of training & development on contextual performance of the employees can be strengthened in an organization with good physical working condition. This indicates that physical working condition positively fortifies the effectiveness of the link between training & development and employee contextual performance in Nigerian polytechnics.

The finding of this research is consistent with the few available studies (e.g., Chen, Ploy hart, Thomas, Anderson & Bliese, 2011; Kim-Soon, Ahmad, & Ahmad, 2014), which confirm the moderating effect of physical working condition on the link between other

predictors (conscientiousness, extraversion) and performance. Moreover, with this finding, it can be said that the result is consistent with the contingency theory's supposition that the context within which organizations operate matters a lot and could determine the success or failure of human resource practices.

5.3.2.5 Moderating Effect of Physical Working Condition on the relationship between Compensation and Task Performance

Hypothesis (H8a) which postulates that physical working condition moderates the relationship between compensation and task performance was not supported as the result obtained from the product term approach for the estimation of the moderation and moderating effect ($\beta=0.102$, $t=1.529$, $p>0.050$) indicates non-moderating role of physical working condition on the link between compensation and task performance. This result indicates that physical working condition failed to moderate the relationship between compensation and task performance in the context of this research. As such, physical working condition is incapable to enhance the link between compensation and task performance and this is also contrary to the expectation of the research.

Considering the context of this research, physical working condition does not enhance the lecturers' task performance because the lecturers are poorly compensated compared to their contemporaries in other countries. Therefore, this implies that physical working condition is of no use when the lecturers are poorly compensated. Compensation is more significant than physical working condition. The lecturers believe that agitation for good compensation comes first and precedes agitation for good physical working condition. This scenario has led to incessant industrial strikes engaged in by the lecturers in their agitation for increment in their pay. In fact, due to this poor compensation, some lecturers

engage in some menial jobs to beef up their earnings. This has been reported to have adversely affected their performances.

It was revealed that physical working condition has weakened the link between compensation and employee task performance. This explains that physical working condition does not moderate such relationship when compensation was perceived to be poor and non-competitive. Perhaps, physical working condition would only strengthen the relationship when the compensation is competitive and fair. When a competitive compensation system is imbedded together with conducive physical working condition in a given organization, the employees in such organization would be motivated and consequently improve their job performance.

5.3.2.6 Moderating Effect of Physical Working Condition on the relationship between Compensation and Contextual Performance

Contrary to hypothesis (H8a), hypothesis (H8b), which postulates that physical working condition moderates the relationship compensation and contextual performance, was supported. This is indicated in the result obtained from the product term approach for the estimation of the moderation and moderating effects ($\beta=0.149$, $t=1.909$, $p<0.050$). This result signifies that physical working condition significantly moderates the link between compensation and contextual performance. This means that if a good physical working condition interacts with compensation level, it would further increase contextual performance of lecturers. This result is consistent with the research of (Gunawa & Amali, 2015; Muslih, 2012).

The positive influence of compensation on employee contextual performance can be augmented by physical working condition. This reflects some scenarios in some Nigerian polytechnics where the lecturers enjoy good physical working conditions as well as competitive pay. The lecturers perform very well in these polytechnics, but in other polytechnics where there is no good physical working condition, their performance is always below expectation.

5.3.2.7 Moderating Effect of Physical Working Condition on the relationship between Performance Appraisal and Task Performance

Hypothesis (H9a) which postulates that physical working condition moderates the link between performance appraisal and task performance was supported as the result obtained from the product term approach for the estimation of the moderation and moderating effects ($\beta = -0.117$, $t = 1.734$, $p < 0.050$) indicates moderating role of physical working condition on the link between performance appraisal and task performance. This result indicates that physical working condition moderates the link between performance appraisal and task performance, indicating that physical working condition strengthens the link between performance appraisal and task performance. The finding of this research is consistent with the few available studies (e.g., Chen et al. 2011; Kim-Soon et al. 2014), which confirm the moderating influence of physical working condition on the link between other predictors (e.g., conscientiousness, extraversion) and performance.

This result implies when performance appraisal process is considered satisfactory, employees task performance will get enhanced, but with good physical working condition performance appraisal will strongly and increasingly enhance employee task

performance. Additionally, the finding of the current research emphasizes that physical working conditions are integral parts of job satisfaction, and satisfaction of employees cannot be completed without some convenience and pleasant experience that the employees have relating to their job.

Also, the finding of the current study can be interpreted to imply that physical working condition is a viable factor that could enhance the link between performance appraisal and the lecturers' task performance in the context of Nigerian polytechnics. The reason could be because when performance appraisal process is considered satisfactory, employee's task performance will get enhanced, but with good physical working condition superior employee task performance would be achieved.

5.3.2.8 Moderating Effect of Physical Working Condition on the relationship between Performance Appraisal and Contextual Performance

Consistent with hypothesis (H9a), hypothesis (H9b), which postulates that physical working condition moderates the relationship performance appraisal and contextual performance, was supported. This is indicated in the result obtained from the product term approach for the estimation of the moderation and moderating effects ($\beta = -0.175$, $t = 2.676$, $p < 0.050$). This result signifies that physical working condition significantly moderates the link between performance appraisal and contextual performance.

This result means that if a good physical working condition interacts with performance appraisal processes, it would further increase contextual performance of lecturers. This indicates that physical working condition further strengthens the relationship between performance appraisal and contextual performance, and this is also in tandem with the

expectation of the study. This finding is consistent with some studies (e.g., Ismail & Gali 2016; Nadeem, Ahmad, Ahmad, & Abdullah, 2015; Kuvaas, 2006).

As indicated in the previous section, this result also implies that when performance appraisal process is considered satisfactory, employee's task performance will get enhanced, but with good physical working condition performance appraisal will strongly and increasingly enhance employee task performance. Likewise, physical working conditions are integral parts of job satisfaction, and satisfaction of employees cannot be completed without some convenience and pleasant experience that the employees have relating to their job.

5.3.2.9 Moderating Effect of Physical Working Condition on the relationship between Employee Involvement and Task Performance

Hypothesis (H10a) formulated from the objective 2 postulates that physical working condition moderates the relationship between employee involvement and task performance. This hypothesis was supported, given the PLS-SEM output ($\beta=0.226$, $t=5.366$, $p<0.001$). This result signifies that physical working condition significantly moderates the link between employee involvement and task performance. As such, physical working condition further strengthens the link between employee involvement and task performance and this is also in tandem with the expectation of the study. It is believed that if a good physical working condition interacts with employee involvement, it would further enhance employee involvement and thus increasing task performance of lecturers. This result is similar to some extent to research of Arslan (2017); Muhammed and Faruq (2017); and Casmir (2009).

The previous findings of this research indicate that employee involvement practice can guarantee employees' ability to express and ideas communication about how organizational objectives can be accomplished. This will translate to enhanced employee task performance. With the current result, it can be said that the positive effect of employee involvement on employee task performance can be boosted by a good physical working condition. In other words, the positive influence of employee involvement on employee task performance can be strengthened in an organization with good physical working condition.

This result also indicates that physical working condition positively strengthen the effectiveness of the relationship between employee involvement and employee task performance in the Nigerian polytechnics. This argument concurs with Leblebici (2012) and Madan and Bajwa (2016) who pointed out that conducive work environment assists employees to be dedicated to work and increase interpersonal harmony. As evident in many previous studies, physical working condition is considered to be a robust contributing factor of job performance. Again, this result is consistent with the few available studies (e.g., Chen, Ploy hart, Thomas, Anderson & Bliese, 2011; Kim-Soon, Ahmad, & Ahmad, 2014), which confirm the moderating influence of physical working condition on the link between other predictors and performance.

5.3.2.10 Moderating Effect of Physical Working Condition on the relationship between Employee Involvement and Contextual Performance

Hypothesis (H10b), which was also formulated from the objective 2, postulates that physical working condition moderates the link between employee involvement and contextual performance. This hypothesis was supported, given the result obtained from the product term approach for the estimation of the moderation and moderating effects ($\beta=0.131$; $t=2.678$, $p<0.05$). Therefore, this result signifies that physical working condition significantly moderates the link between employee involvement and contextual performance. Hence, lecturers are of the belief that if a good physical working condition interacts with employee involvement, it would further increase employee involvement and consequently improve contextual performance. This result has some similarities with some studies (e.g., Arslan, 2017; Muhammed & Faruq, 2017; Casmir, 2009).

As indicated previously, this result equally indicates the positive influence of employee involvement on employee contextual performance can be enhanced by a good physical working condition. This also signifies that working condition positively strengthen the effectiveness of the relationship between employee involvement and employee contextual performance in the Nigerian polytechnics. This finding is consistent with the few available studies (e.g., Chen, Ploy hart, Thomas, Anderson & Bliese, 2011; Kim-Soon, Ahmad, & Ahmad, 2014), which confirm the moderating influence of physical working condition on the relationship between other predictors and performance.

Overall, the results of the present study have proven that physical working condition is a significant internal boundary condition (organizational based factors) for the link between selected HPWPs and employee job performance. This gives support to a theoretical

supposition which signifies that the success or failure of human resource systems rest on external and internal boundary conditions (Chadwick et al., 2013).

These findings are in tandem with contingency theory which supposes that the context within which an organization operates and the situation in which organization finds itself determine the kinds of aims, strategies, policies, etc. that will be adopted by such organization. HPWPs can be destructive or helpful depending on external and internal boundary conditions, and the environment in which organization operates determines to a large extent the human resource practices and policies (Chadwick et al., 2013; Teo et al., 2011).

5.4 Research Implications

From the above sections, the results of the research were discussed based on the study research questions and hypotheses. Therefore the results of the research have many vital implications to theory and practice. Both the theoretical, practical and methodological, implications are discussed in the section.

5.4.1 Theoretical Implications

Owing to the unique findings of this research, it could be asserted that this research has enriched the existing literature and broaden the scope of the extant body of knowledge in the HRM study area by providing empirical evidences for the moderating role of physical working condition in the connection between HPWPs and on lecturers' performance in Northwestern Nigeria Polytechnics.

This study stands out with its unique findings as it had proven that physical working condition is a significant internal boundary condition for the link between some selected HPWPs and employee job performance, and thus gives support to the contingency theoretical supposition which signifies that the success or failure of HR systems hinge on external and internal boundary conditions (Chadwick et al., 2013). Also, to the best knowledge of the researcher, this study is the first of its kind in the context of Nigeria as it investigated the moderating role of physical working condition in the connection between HPWPs and on lecturers' performance in Northwestern Nigeria Polytechnics.

This study has provided a profound insight and advanced the field of knowledge further as the findings established that physical working condition moderate the relationships between HPWPs and employee job performance in Northwestern Nigeria Polytechnics. Thus, this study extends the existing literature as there is no research found to have examined the moderating effect of physical working condition on HRM-performance connection, although the few available studies (e.g., Chen, Ploy hart, Thomas, Anderson & Bliese, 2011; Kim-Soon, Ahmad, & Ahmad, 2014) tested the moderating role of physical working condition on the link between other predictors (e.g., conscientiousness, extraversion) and performance.

Furthermore, it is noteworthy that the major gap filled by this study is the inclusion of moderation in the model, because the moderated research model of this study, which was developed, valuated and established via literature survey, widens the scope of the prevalent business theories.

Also, in an organizational context, this study confirms social exchange theory which explains that employees and organizations come in into reciprocal relationships in which

the organization is expected to provide adequate support and a conducive physical working condition for employees in exchange for loyalty, commitment and higher performance on the part of the employee (Cropanzano & Mitchell, 2005). Based on this, it can be argued that individuals who perceive that their organizations have provided them with adequate support and conducive working environment will feel obligated to reciprocate. The employees' reciprocal act can include higher organizational commitment, loyalty and job performance.

In summary, the results of this study have highlighted the significance of physical working condition in strengthening HPWPs (recruitment and selection, compensation, training and development, performance appraisal, and employee involvement) towards achieving higher performance of lecturers in Northwestern Nigeria polytechnics. Therefore, this research has made meaningful and significant contributions theoretically.

5.4.2 Practical Implications

In Nigerian context, the present research suggested some practical implications for the policy-makers and stakeholders. Firstly, the results suggest that with provision of good physical working conditions and effective HR practices, the lecturers can make considerable efforts in reducing the occurrence of unproductive performance and improve their performances. More so, result-oriented performance appraisal should be carried out periodically so as to keep tracks of efficient and inefficient lecturers. Also, employee involvement in decision making process of the polytechnics should be given adequate consideration.

Furthermore, the findings recommended that HPWPs were related to employee's job performance. In particular, the performance appraisal, training and development and employee involvement were established to be significantly linked to employee's job performance in the entire sample. Thus, management of the polytechnics could minimize the likelihood of lecturers from unproductive performance through effective training and development programs such as conferences, workshop, seminars, sponsorship of acquisition of higher degree so that they keep themselves updated and relevant in the present polytechnics system.

Finally, as stated earlier, inefficient performance of academic staff is a setback to polytechnics system, Consequently, the results of the present research suggest that both government and the management influences should be kept aside, individual excellence should be given utmost priority in the employment of academic staff process in the Nigerian polytechnics. Specifically, physical working condition needs to be improved so that the possibilities of recording inefficient performance on the part of the lecturers; this is evidenced in the results of the moderating power of physical work condition between HPWP's and employee performance.

5.5 Limitations and Future Research Directions

Though this study was able to establish relationship between some HPWPs and employee performance (both task and contextual) the study is characterized by some limitations, of in ability to cover all the important HPWP's such as as job security, team work, organizational commitment, and work design in relation to job performance, also to

investigate physical working condition as potential mediator as such, future researchers may want to investigate in this direction.

First and foremost, research design of this research is cross-sectional research design which does not give room for causal inferences to be made from the population. So, a longitudinal research design could be used for the future research in order to measure the theoretical constructs at different points in time so as to validate the results of the current research.

Furthermore, employee performance was assessed using self-report measures. Self-report measures are valid in measuring the performance of employee, most especially, when anonymity was assured during the data collection exercise (Bennett & Robinson, 2000). However, given the position of Podsakoff et al. (2003), the use of self-reports is related to common method variance and, according to Dodaj (2012), Podsakoff and Organ (1986), and Randall and Fernandes (1991), it is also associated with social desirability bias.

Originally, this research attempts to lessen these anomalies by guaranteeing anonymity and enhancing scale items (Podsakoff et al., 2003; Podsakoff et al., 2012), but it is likely that the respondents of this study might have under-reported their non-conformity on survey questionnaires. Thus, future research may consider employment of other approaches to evaluate employee performance.

Nevertheless, subjective measure is at risk to many kinds of judgmental biases (Dunlop & Lee, 2004). It was not quite easy to obtain objective data (Detert et al., 2007). The use of objective measure would have clearly supported the results. Hence, future study is

needed to replicate the findings of the present research using objective measurements of employee performance.

Finally, the present research offers quite limited generalizability as it concerned mostly on teaching staff from polytechnics situated in the north-west Nigerian geopolitical zone. Consequently, additional work is needed to include other geopolitical zones and non-teaching staff from various polytechnics so that to generalize the findings. Polytechnics should be studied and compared with other institutions of higher education of learning such as universities, mono-technics and colleges of education.

5.6 Conclusion

The results of the hypotheses tested via structural model of PLS-SEM showed that out of the 20 proposed hypotheses, 13 hypotheses were supported and the remaining 7 hypotheses were not supported. The results have demonstrated that physical working condition is a significant internal boundary condition for the link between selected HPWPs and employee job performance. These findings are in tandem with contingency theory which supposes that the context within which organization operates and the situation determine the aims, policies and strategies that will be adopted by such organization. HPWPs can be destructive or helpful depending on external and internal boundary conditions, and the environment in which organization operates determines to a large extent the human resource practices and policies.

The present study has also contributed theoretically and otherwise to the existing body of knowledge as it establishes moderating role of physical working condition on the link between HPWPs (recruitment and selection, compensation, training & development,

performance appraisal, employee involvement) and employee job performance (task and contextual performance). Although there are some limitations in this study, it has successfully provided answers to all the research questions and objectives. While there have been many research investigating the basis of inefficient performance, however, this research addressed the theoretical gap through the incorporation of physical working condition as an important moderating variable (Jibrin-bida, Abdul-majid, & Ismail, 2017).

These research findings have presented and explicated both theoretical and practical implications for organizations and their management. Also, from the limitations of the present research, and highlighted a number of future research directions. Finally, the present study has extended the frontier of knowledge in terms of theoretical, practical, and methodological values especially in the field of organizational psychology and HRM.

REFERENCES

- Abba, H. D., & Mugizi, W. (2018). Performance of academic staff in polytechnics: an analysis of performance levels in North West geo – political zone of Nigeria, 2(3), 187–192. <https://doi.org/10.15406/ahoj.2018.02.00056>
- Abbasi, A. S., & Mir, G. M. (2012). Impact of Teacher's Ability, Student's Work Ethics and Institutional Environment on Student Performance of University of Gujrat. *Middle-East Journal of Scientific Research*, 12(4), 572–579. <https://doi.org/10.5829/idosi.mejsr.2012.12.4.1716>
- Abdul, P., & Awan, G. (2015). Impact of working environment on employee ' s productivity: A case study of Banks and Insurance Companies in Pakistan. *European Journal of Business and Management*, 7(1), 329–346.
- Abubakar, M. I. F. M. (2017). The Moderating Effect of Physical Working Environment on Job Attitude and Employee Performance. *International Sciences of Management Journal*, 3(3), 1–14.
- Abubakar, T., & Allumi, N. A. (2013). Assessing the effect of human resource management (HRM) practices on employee job performance: a study of usmanu dan fodiyo university, sokoto. *Journal of Business Studies* 2, 5(2), 247–259.
- Adamolekun, B. L. (2016). Education Sector In Crisis: Evidence , causes and possible remedies. *Vanguard Newspaper*, pp. 1–34.
- Adeniyi, E. O., & Taiwo, S. A. (2011). Funding higher education in Nigeria through Cost sharing: Perception of lecturers, students and parents. *European Journal of Social Sciences*, 24(4), 2–13.
- Adeogun, A. A., Subai, S. T., & Osifila, G. I. (2009). Deregulation of university education

- in Nigeria: Problems and prospects. *Florida Journal of Educational Administration & Policy*, 3(1), 1–8.
- Agbu, J. F. O., & Mishra, .S. (2017). *Open Educational Resources Policy for Higher Education in Nigeria*. Retrieved from Open Educational Resources Policy for Higher Education in Nigeria[Accessed 12 maech 2017]
- Aguinis, H., & Kurt Kraiger. (2009). Benfits of Training and Development for Individuals, Teams, Organization and Society. *Annual Review of Psychology*, 60, 451–474.
- Aisha, A. (2013). Effects of Working Ability, Working Condition, Motivation and Incentive on Employees Multi-Dimensional Performance. *International Journal of Innovation, Management and Technology*, 4(6), 605–609.
- Ajala, E. M. (2012). the Influence of Workplace Environment on Workers' Welfare, Performance and Productivity. *The African Symposium: An Online Journal of the African Educational Research Network*, 12(1), 141–149.
- Ajibade, O. E., Ajayi, T. O., & Shobowale, O. (2017). Leadership Style and Employees' Performance in Nigerian Federal Polytechnics: A Study of Federal Polytechnic, Ilaro, Ogun State. *Journal of Public Administration, Finance and Law Where*, (11), 17–30.
- Akgunduz, Y. (2015). "The influence of self-esteem and role stress on job performance in hotel businesses." *International Journal of Contemporary Hospitality Management*, 27(6), 1082–1099.
- Akinbowale, M.A., Jinabhai, D. C., & Lourens, M. E.(2013). The impact of performance appraisal policy on employee performance. *Mediterranean Journal of Social Science*, 4(114).

- Akinbowale, M. A., Jinabhai, D. C., & Lourens, M. E. (2013). The Impact of Performance Appraisal Policy on Employee Performance—A Case Study of Guaranty Trust Bank in Nigeria. *Mediterranean Journal of Social Sciences*, 4(14), 677–686. <https://doi.org/10.5901/mjss.2013.v4n14p677>
- Akindele, I. (2012). Teacher-Related Factors in Educational Crises: The Way Forward in Nigeria's Case. *International Journal of Education*, 4(4), 380–394.
- Al-Omari, K., & Okasheh, H. (2017). The Influence of Work Environment on Job Performance: A Case Study of Engineering Company in Jordan. *International Journal of Applied Engineering Research*, 12(24), 15544–15550. Retrieved from <http://www.ripublication.com>
- Ali, W., & Rizwan, M. (2013). Factors influencing corporate social and environmental disclosure (csed) practice in the developing countries: an institutional theoretical perspective. *International Journal of Asian Social Science*, 3(3), 590–609.
- Allworth, E., & Hesketh, B. (1999). Construct-oriented Biodata : Capturing Change-related and Contextually Relevant Future Performance. *International Journal of Selection and Assessment*, 7(2), 97–111.
- Altman, M. (2006). *Introduction: Handbook of Contemporary Behavioral Economics: Foundations and Developments*.
- Altman, M. (2015). *Handbook of contemporary behavioral economics: foundations and developments*. Routledge.
- Amin, A., Saeed, R., & Lodhi, R. N. (2013). The Impact of Employees Training On the Job Performance in Education Sector of Pakistan. *Middle-East Journal of Scientific Research*, 17(9), 1273–1278. <https://doi.org/10.5829/idosi.mejsr.2013.17.09.12289>
- Aminu, M. D. (2018). Why Northern Nigeria is Educationally

Disadvantaged <https://educeleb.com/tag/northern-nigeria/>

and

<https://educeleb.com/author/educeleb-bloggers>.

Aminu, W. (2015). Sokoto to declare state of emergency in education sector. Retrieved from <http://www.ngrguidiannews.com/2015/12/sokoto-to-declare-state-of-emergency-in-education-sector/>. *Daily Trust Newspaper*, 1-4.

Amir, F. (2010). Measuring the impact of office environment on performance level of employees: A case of private sector of Pakistan. Chapter on Nurturing Innovation, Entrepreneurship, Investments and Public Private Partnership-in Global Environment. *In Proceedings of the 2nd International Conference of AGBA South Asia*, 247-264.

Anakwe, U. P. (2002). Human resource management practices in Nigeria: Challenges and insights. *International Journal of Human Resource Management*, 13(7), 1042-1059. <https://doi.org/10.1080/09585190210131285>

Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*, 63(3), 308-323. <https://doi.org/10.1108/IJPPM-01-2013-0008>

Appelbaum, E., Bailey, T., Berg, P. B., Kalleberg, A. L., & Bailey, T. A. (2000). *Manufacturing advantage: Why high-performance work systems pay off*. Cornell University Press.

Arik, P. & Kato, M. (2010). Correction among corporate productivity performance assessment system and salary system (a numerical representation of qualitative survey). *Research Journal of International Studies*, 16.

Arowolo, D. (2012). Ethics, Motivation and Performance in Nigeria's Public Service.

Public Policy and Administration Research, 2(5), 37–43.

Aryee, S., Walumbwa, F. O., Seidu, E. Y., & Otaye, L. E. (2012). Impact of high-performance work systems on individual- and branch-level performance: Test of a multilevel model of intermediate linkages. *Journal of Applied Psychology*, 97(2), 287–300.

Asfaw, A. M., Argaw, M. D., & Bayissa, L. (2015). The Impact of Training and Development on Employee Performance and Effectiveness: A Case Study of District Five Administration. *Journal of Human Resource and Sustainability Studies*, 3(04), 188–202.

Asiedu-Appiah, F., & H., A. (2014). an Investigation Into the Causal Relationship Between Employee S ' Locus of Control and Contextual Performance. *Proceedings of ASBBS Annual Conference: Las Vegas*, 21(1), 40–59.

Asika, N. (1991). *Research methodology in the behavioural sciences*. Lagos: Longman Nigeria Pie.,

Asiyai, R. I. (2013). Challenges of Quality in Higher Education in Nigeria in the 21st Century. *International Journal of Educational Planning & Administration*, 3(2), 159–172.

Asiyai, R. I. (2015). Improving Quality Higher Education in Nigeria: The Roles of Stakeholders. *International Journal of Higher Education*, 4(1), 61–70.

Awadh, A.M. & Saad, A. M. (2013). Impact of Organizational Culture on Employee Performance. *International Review of Management and Business Research*, 2(1), 168–175.

Azmoodeh, M., & Rezaei-dizgah, M. (2015). Effect of Psychological Capital on Employees ' Job Performance in Forensic Medicine of Guilan , Mazandaran , and

- Golestan Provinces. *Journal of Applied Environmental*, 5(10), 165–171.
- Babagana, S. A. (2014). Influence of Training and Development on Lecturers Performance in Nigerian Polytechnics: A Case of Federal Polytechnic , Bauchi. *International Journal of Finance and Management in Practice*, 2(1), 11–20.
- Babatope, B. A. (2010). Problems of facilities in South-West Nigerian universities and the way forward. *Journal of Education Administration and Policy Studies*, 2(2), 39–43.
- Bagozzi, R. P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the Academy of Marketing Science*, 40(1), 8–34. <https://doi.org/10.1007/s11747-011-0278-x>
- Bailey, T., & Merritt, D. (1992). Discretionary effort and the organization of work: Employee participation and work reform since Hawthorne. New York: Columbia University, Teachers College and Conservation of Human Resources. *Paper Prepared for the Sloan Foundation*.
- Baird, L. S. (1977). Self and Superior Ratings of Performance: As Related to Self-Esteem and Satisfaction with Supervision. *The Academy of Management Journal*, 20(2), 291–300. <https://doi.org/10.1109/EMR.1980.4306853>
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Manage. *European Journal of Work and Organizational Psychology*, 43(1), 83–104. <https://doi.org/10.1002/hrm.84>
- Bakotić, D., & Tomislav, B. (2013). Relationship between Working Conditions and Job

- Satisfaction : The Case of Croatian Shipbuilding Company. *International Journal of Business and Social Science*, 4(2), 206–213.
- Bamberger, P. A., Meshoulam, I., & Biron, M. (2000). *Human resource strategy: Formulation, implementation, and impact*. Routledge.
- Bamiro, O. A. (2012). Tertiary education in Nigeria and the challenge of corporate governance., 1–41.
- Barlett, J.E., Kotrlik, J. ., & Higgins, C. . (2001). Organizational research: Determining appropriate sample size in survey research appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19(1), 43.
- Becker, B. E., & Huselid, M.A. (2006). Strategic human resources management: Where do we go from here? *Journal of Management*, 32(6), 898–925.
<https://doi.org/10.1177/0149206306293668>
- Belle, G. Van, & Millard, S. P. (2011). *Statistical rules of thumb (Vol. 699)*. John Wiley & Sons.
- Bello-Pintado, A. (2015). Bundles of HRM practices and performance: Empirical evidence from a Latin American context. *Human Resource Management Journal*, 25(3), 311–330. <https://doi.org/10.1111/1748-8583.12067>
- Bhatti, M.A., & Kaur, S. (2010). The role of individual and training design factors on training transfer. *Journal of European Industrial Training*, 34(7), 656–672.
<https://doi.org/10.1108/03090591011070770>
- Bilal, H., Shah, B., Yasir, M., & Mateen, A. (2015). Employee Engagement and Contextual Performance of Teaching Faculty of Private Universities. *Journal of Managerial Sciences*, ix(1), 82.
- Bish, A. J., & Kabanoff, B. (2014). Star Performers: Task and Contextual Performance

- are Components, But Are They Enough? *Asia Pacific Journal of Human Resources*, 52(1), 110–127.
- Blau, P. M. (1964). *Exchange and power in social life*. Transaction Publishers.
- Bodla, M.A., Ali, H., & Ali, N. (2013). Impact Of organizational Culture on Performance of Universities in Pakistan, 18(9), 1313–1321.
- Bonsu, C. A., & Kusi, A. (2014). Effects of motivation on job performance of local government workers in Ghana: A case study of Atwima Nwabiagya District Assembly in the Ashanti Region. *International Journal of Management Sciences*, 2(8), 337–350.
- Boon, C., Belschak, F. D., Den Hartog, D. N., & Pijnenburg, M. (2014). Perceived human resource management practices: Their effect on employee absenteeism and time allocation at work. *Journal of Personnel Psychology*, 13(1), 21–33. <https://doi.org/10.1027/1866-5888/a000101>
- Borman, W. C., & Motowidlo, S. M. (1993a). *Expanding the criterion domain to include elements of contextual performance*. Psychology Faculty Publications.
- Borman, W. C., & Motowidlo, S. M. (1993b). *Expanding the criterion domain to include elements of contextual performance*. *Personnel Selection in Organizations*; San Francisco: Jossey-Bass, 71.
- Boselie, J.P., Dietz, G., & Boon, C. (2005). Commonalities and contradictions in research on human resource management and performance. *Human Resource Management Journal*, 15(3), 67–94. <https://doi.org/10.1111/j.1748-8583.2005.tb00154.x>
- Boselie, P. (2010). High performance work practices in the health care sector: A Dutch case study. *International Journal of Manpower*, 31(1), 42–58. <https://doi.org/10.1108/01437721011031685>

- Boxall, P.(2012). High-performance work systems: What, why, how and for whom? *Asia Pacific Journal of Human Resources*, 50(2), 169–186.
<https://doi.org/10.1111/j.1744-7941.2011.00012.x>
- Boxall, P., & Macky, K. (2009). Research and Theory on High Performance Work Systems: Progressing the high involvement stream. *Human Resource Management Journal*, 19(1), 3–23.
- Brown, E. D. (2006). Implementing a high performance work system. Aligning Technology, Strategy, people & projects. *Aligning Technology, Strategy, People & Projects*, 1–11.
- Brussig, M. (2015). Working Conditions in the Last Job and Transitions into Old-Age Pensions: An Analysis of Two Pension Entry Cohorts in Germany. *Work, Aging and Retirement*, 2(1), wav016.
- Calvin, O. Y. (2017). the Impact of Remuneration on Employees'Performance (a Study of Abdul Gusau Polytechnic, Talata-Mafara and State College of Education Maru, Zamfara State). *Arabian Journal of Business and Management Review (Nigerian Chapter)*, 4(2), 34–43. <https://doi.org/10.12816/0037554>
- Campbell, C.H., & Ford, P. (1990). Development of multiple job performance measures in a representative sample of jobs. *PERSONNEL PSYCHOLOGY*, 43, 227–300.
- Campbell, J., McCloy, R., Oppler, S., & Sager, C. (1993). *A Theory of performance: in N. Sechmitt & WC Borman (Eds)*
- Carlson, D. S., Upton, N., & Seaman, S. (2006). The Impact of Human Resource Practices and Compensation Design on Performance: An Analysis of Family-Owned SMEs Dawn. *Journal of Small Business Management*, 44(4), 531–546.
- Carpenter, M., Bauer, T., & Erdogan, B. (2010). *Principles of management. flatworld*

Knowledge.

Cavana, R., Delahaye, B. L., & Sekaran, U. (2001). *Applied business research: Qualitative and quantitative methods*. New York, NY: John Wiley & Sons.

Chadwick, C., Way, S. A., Kerr, G., & Thacker, J. W. (2013). Boundary conditions of the high-investment human resource systems-small-firm labor productivity relationship. *Personnel Psychology*, 66(2), 311–343.

Chandrani Sen. (2017). Job Characteristics and Performance: The Mediating Role of Job. *The International Journal of Indian Psychology*, 5(1), 2348–5396. <https://doi.org/10.25215/0501.068>

Chandrasekar, K. (2011). Workplace Environment and Its Impact on Organisational Performance in Public Sector. *International Journal of Enterprise Computing and Business Systems*, 1(1), 1–16.

Chen, C., Lee, S. Y., & Stevenson, H. W. (1995). Response style and cross-cultural comparisons of rating scales among East Asian and North American students. *Psychological Science*, 6(3), 170–175. <https://doi.org/10.1111/j.1467-9280.1995.tb00327.x>

Cho, T., & Yoon, S. (2009). Human Resource Management, Individualism-Collectivism, and Individual Performance among Public Employees: A Test of the Main and Moderating Effects*. *The Korean Journal of Policy Studies*, 23(2), 57–78. Retrieved from http://s-space.snu.ac.kr/bitstream/10371/69824/1/kjps_23_2_57-78.pdf

Choi, J. (2014). The International Journal of Human Who should be the respondent? Comparing predictive powers between managers ' and employees ' responses in measuring high-performance work systems practices. *International Journal of Human Resource Management*, 25(19), 2667–2680.

<https://doi.org/10.1080/09585192.2014.890121>

Choi, J., & Lee, K. (2013). Effects of employees' perceptions on the relationship between HR practices and firm performance for Korean firms. *Personnel Review*, 42(5), 573–594. <https://doi.org/10.1108/PR-12-2011-0176>

Choi, M., & Yoon, H.J. (2015). Training investment and organizational outcomes: a moderated mediation model of employee outcomes and strategic orientation of the HR function. *International Journal of Human Resource Management*, 26(20), 2632–2651. <https://doi.org/10.1080/09585192.2014.1003084>

Claire Armstrong, Patric C. Flood, James P. Guthrie, Wenghuan Liu, Sarah Maccurtain, A. T. M. (2010). The impact of diversity and equality management on firm performance: Beyond high performance work systems. *HUMAN RESOURCE MANAGEMENT*, 49(6), 997–998.

Clark, N. (2013). Education in Nigeria. *World Education News Series*.

Connelley, L. M. (2008). Pilot Studies. *MedSurg*, 17(6), 411–412.

Conway, J.M. (1999). Distinguishing Contextual Performance From Task Performance for Managerial Jobs. *Journal of Applied Psychology*, 84(1), 3–13.

Creswell, J. W. (2012). *Educational research planning, conducting and evaluating quantitative and qualitative research. (4 ed.)*. Edward Brothers Inc.

Cropanzano, R., & Mitchell, M. S. (2005). Social Exchange Theory: An Interdisciplinary Review Social Exchange Theory: An Interdisciplinary Review. *Journal of Management*, 31(6), 874–900. <https://doi.org/10.1177/0149206305279602>

Daoanis, L. E. (2012). PERFORMANCE APPRAISAL SYSTEM: It's Implication To Employee Performance. *International Journal of Economics and Management Sciences*, 2(3), 5562.

- Das, B., & Shikdar, A. A. (1999). Participative Versus Assigned Production Standard Setting in a Repetitive Industrial Task: A Strategy for Improving Worker Productivity Participative Versus Assigned Production A Strategy for Improving Worker Productivity. *International Journal of Occupational Safety and Ergonomics*, 5(3), 417–430. <https://doi.org/10.1080/10803548.1999.11076429>
- Datta, D. K., Guthrie, J.P., Wright, P. M., Guthrie, J.P., & Wright, P. M. (2005). Human Resource Management and Labor Productivity: Does Industry Matter? *Academy of Management*, 48(1), 135–145.
- David, D., Vught, V., & Frans, A. (2010). *National Innovation and the Academic Research Enterprise: Public Policy in Global Perspective*.
- David P. Lepak, M. Susan Taylor, Amanuel Telkfab, Jennifer A. Marrone, and D. J.C. (2007). An Examination of the Use of High-Investments Human Resource systems for Core and Support Employees. *Human Resource Management*, 46(2), 223–246. <https://doi.org/10.1002/hrm>
- Delery, J.E., & Roumpi, D. (2017). Strategic human resource management, human capital and competitive advantage: is the field going in circles? *Human Resource Management Journal*, 27(1), 1–21. <https://doi.org/10.1111/1748-8583.12137>
- Demirbag, M., Collings, D., Tatoglu, E., & Mellahi, K. (2014). High-Performance Work Systems and Organizational Performance in Emerging Economies: Evidence from MNEs in Turkey.
- Demo, G., Neiva, E. R., Nunes, I., & Rozzett, K. K. (2012). Human Resources Management Policies and Practices Scale (HRMPPS): Exploratory and Confirmatory Factor Analysis. *Brazilian Administration Review*, 9(4), 395–420. <https://doi.org/10.1590/S1807-76922012005000006>

- Demortier, A.-L. P., Delobbe, N., & El Akremi, A. (2014). Opening the Black Box of HR Practices - Performance Relationship: Testing a Three Pathways AMO Model. *Academy of Management Proceedings*, 2014(1), 14932–14932. <https://doi.org/10.5465/AMBPP.2014.102>
- DeNisi, A. S., & Pritchard, R. D. (2006). Performance Appraisal , Performance Management and Improving Individual Performance: *Management and Organization Review*, 2(2), 253–277.
- Dessler, G. (2011). *Fundamentals of Human Resource Management*, 4th edition.
- Drummond, I., & Stone, I. (2007). Exploring the potential of high performance work systems in SMEs. *Employee Relation*, 29(2), 192–207. <https://doi.org/10.1108/EL-01-2017-0019>
- Durrah, O., Alhamoud, A., & Khan, K. (2017). Positive psychological capital and job performance : The mediating role of job satisfaction. *International Scientific Researches Journal*, 23(6), 998–1016. <https://doi.org/10.21506/j.ponte.2016.7.17>
- Edralin, D. (2004). Training: A strategic HRM function. *Notes on Business Education*, 7(4), 1–5.
- Edwards, P., & Ram, M. (2006). The Structuring of Working Relationships in Small Firms: Towards a Formal Framework. *Organization Articles*, 13(5), 701–724. <https://doi.org/10.1177/1350508406067010>
- Efanga, S. I., Aniedi, M. O., & Idente, G. O. (2015). Organizational Justice and Job Performance of Lecturers in Federal Universities in South-South Zone of Nigeria. *American International Journal of Social Science*, 4(1), 111–117.
- Egu, R.H. N., Ememe, O. N., Obike, N. C., & Clement-Ukandu, O. C. (2014). Managing Stress among Lecturers in Polytechnics of South Eastern Nigeria. *Mediterranean*

- Journal of Social Sciences*, 5(6 SPEC. ISSUE), 333–338.
<https://doi.org/10.5901/mjss.2014.v5n6p333>
- Ehige, B. O., Kolade, I. A., & Afolabi, O. yooluwa. (2006). Personality factors influencing politicians' attitudes toward wellbeing of citizens: A study in southwest nigeria. *International Journal of Public Sector Management*, 19(5), 428–446.
- Ehrlich, K., & Cataldo, M. (2012). All-for-one and one-for-all?: a multi-level analysis of communication patterns and individual performance in geographically distributed software development. In Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work., *Proceedings of the ACM 2012*, 945–954.
- Elmore, P. B., & Beggs, D. L. (1975). Salience of concepts and commitment to extreme judgments in the response patterns of teachers. *Education*, 95(4), 325–330.
- Eluka, P. J. C., & Nwonu, C. O. (2014). A Critical Review of The Effect of Working Conditions On Employee Performance: Evidence From Nigeria., 2–11.
- Erat, S., Erdil, O. Kitapçı, H., & Comlek, O. (2012). Erat, S., Erdil, O. Kitapçı, H., & Comlek, O. The effect of the perception of Organizational trust and organizational support on intention to quit and Individual performance: An empirical study of the Turkish state universities. *African Journal of Business Management*, 6(30), 8853–8861.
- Eta, P. (2015). President Buhari Inuagral speech. Retrieved from <http://dailypost.ng/2015/05/29/full-text-of-president-buhari-s-inuagration-speech/>.
Daily Trust Newspapers, pp. 25–27.
- Evans, W. R., & Davis, W. D. (2005). High-performance work systems and organizational performance: The mediating role of internal social structure. *Journal of Management*, 31(5), 758–775. <https://doi.org/10.1177/0149206305279370>

- Evans, E. G. (2012). Another look at performance appraisal in libraries. Available at www.unesco.org/webworld/ramp/html [accessed 20 March, 2019].
- Falola, H. O., Osibanjo, a O., & Ojo, S. I. (2014a). Effectiveness of Training and Development on Employees ' Performance and Organisation Competitiveness in the Nigerian Banking Industry. *Bulletin of the Transilvania University of Brasov Series V: Economic Sciences*, 7(56), 161–170.
- Falola, H. O., Osibanjo, a O., & Ojo, S. I. (2014b). Effectiveness of Training and Development on Employees' Performance and Organisation Competitiveness in the Nigerian Banking Industry. *Bulletin of the Transilvania University of Brasov Series V: Economic Sciences*, 7(56), 161–170. <https://doi.org/10.1057/palgrave/ejis/3000424>
- Fan, D., Cui, L., Zhang, M. M., Zhu, C. J., Härtel, C. E. J., & Nyland, C. (2014). The International Journal of Human Influence of high performance work systems on employee subjective well- being and job burnout: empirical evidence from the Chinese healthcare sector. *International Journal of Human Resource Management*, 25(7), 931–950. <https://doi.org/10.1080/09585192.2014.876740>
- Fareo, D. O. (2013). Professional development of teachers in Africa: A case study of Nigeria. In *The African Symposium: An Online Journal of the African Educational Research Network*, 13(1), 63–68.
- Fasasi, Y. A., P.A.O., E., & Oyeniran, S. (2016). Malaysian Online Journal of Maximum Job Performance in Nigerian Higher. *MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT*, 4(1), 32–43.
- Ferreira, P., Neira, I., & Vieira, E. (2012). The Strategic Approach to the High-performance Paradigm: A European Perspective. *Procedia - Social and Behavioral*

- Sciences*, 58, 474–482. <https://doi.org/10.1016/j.sbspro.2012.09.1024>
- Folorunso, O. O., Adewale, A. J., & Abodunde, S. M. (2014). Exploring the Effect of Organizational Commitment Dimensions on Employees Performance: An Empirical Evidence from Academic Staff of Oyo State Owned Tertiary Institutions, Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 4(8), 275–286. <https://doi.org/10.6007/IJARBS/v4-i8/1096>
- Fu, N. (2013). EXPLORING THE IMPACT OF HIGH PERFORMANCE WORK SYSTEMS IN PROFESSIONAL SERVICE FIRMS: A. *Consulting Psychology Journal: Practice and Research*, 65(3), 240–257. <https://doi.org/10.1037/1065-9293.65.3.240>
- Gardner, R. G., Harris, T. B., Li, N., Kirkman, B. L., & Mathieu, J. E. (2017). Understanding “ It Depends ” in Organizational Research: A Theory-Based Taxonomy , Review , and Future Research Agenda Concerning Interactive and Quadratic Relationships. *Organizational Research Method (SAGE)*, xx(x), 1–29. <https://doi.org/10.1177/1094428117708856>
- Gattiker, E. (1995). Firm and Taxpayer Returns from Training of Semiskilled Employees. *Academy of Management Journal*, 38(4), 1152–1173. Retrieved from <https://www.js>
- Gerber, R. (1998). “How do workers learn in their work?” *The Learning Organization*, 5(4), 168–175.
- Gittell, J. H., Seidner, R., & Wimbush, J. (2010). A Relational Model of How High-Performance Work Systems Wor. *Organization Science*, 21(2), 490–506. <https://doi.org/10.1287/orsc.1090.0446>
- Godard, J. (2004). A Critical Assessment of the High-Performance Paradigm. *British Journal of Industrial Relations*, 42(2), 349–378.

- Godard, J. (2010). What is best for workers? The implications of workplace and Human Resource Management practices revisited. *Industrial Relations*, 49(3), 466–488. <https://doi.org/10.1111/j.1468-232X.2010.00610.x>
- Godard, J., & Delaney, J. T. . (2016). Reflections on the " High Performance" Paradigm ' s Implications for Industrial Relations as a Field. *Industrial and Labor Relations Review*, 53(3), 482–502.
- Goldsby, T. J., Knemeyer, A. M., Miller, J. W., & Wallenburg, C. M. (2013). Measurement and Moderation: Finding the Boundary Conditions in Logistics and Supply Chain Research. *Journal of Business Logistics*, 34(2), 106–116.
- Griffin, M. A., Neal, A., Parker, S. K., Griffin, M. A., & Parker, S. K. (2007). Interdependent Contexts Linked references are available on JSTOR for this article: A NEW MODEL OF WORK ROLE PERFORMANCE: POSITIVE BEHAVIOR IN UNCERTAIN AND INTERDEPENDENT CONTEXTS The University of Queensland, 50(2), 327–347.
- Grote, N. K., Bridge, J. A., & Gavin, A. R. (2011). A Meta-analysis of Depression During Pregnancy and the Risk of Preterm Birth, Low Birth Weight, and Intrauterine Growth Restriction, 67(10), 1012–1024.
- Gupta, C. (2006). *Human Resource Management (Rev. edition, ed.)*. New Delhi: Sultan Chand & Sons.
- Guthrie, J.P. (2001). High-Involvement Work Practices, Turnover, and Productivity: Evidence from New Zealand Author (s): James P . Guthrie Source: The Academy of Management Journal, Vol. 44, No. 1 (Feb., 2001), pp. 180-190 Published by: Academy of Management Sta. *Academy of Management Journal*, 44(1), 180–190.
- Guthrie, J.P., Spell, C. S., & Nyamori, R. O. (2002). Correlates and consequences of high

- involvement work practices: The role of competitive strategy. *International Journal of Human Resource Management*, 13(1), 183–197.
<https://doi.org/10.1080/09585190110085071>
- Hafeez, U., & Akbar, W. (2015). "Impact of Training on Employees Performance" (Evidence from Pharmaceutical Companies in Karachi, Pakistan). *Business Management and Strategy*, 6(1), 49.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *The Journal of Marketing Theory and Practice*, 19(2), 139–152.
<https://doi.org/10.2753/MTP1069-6679190202>
- Halim, Y. A. (2009). Development and Validation of an Instrument to Access the Lecturers' Performance in the Education and Teaching Duties. *Jurnal Pendidikan Malaysia*, 34(2), 33–47.
- Handel, M. J., & Levine, D. (2004). Editors' Introduction: The Effects of New Work Practices on Workers. *Industrial Relations: A Journal of Economy and Society*, 43(1), 1–43. <https://doi.org/10.1111/j.0019-8676.2004.00317.x>
- Harley, B., Allen, B. C., & Sargent, L. D. (2007). High Performance Work Systems and Employee Experience of Work in the Service Sector: The Case of Aged Care. *British Journal of Industrial Relations*, 45(3), 607–633.
- Harrison, A. (2012). Poor teachers face tougher system under shake-up. *Education Correspondent, BBC News*, pp. 1–4. Retrieved from <https://www.bbc.co.uk/news/education-16535191>

- Hassan, S. (2016). Impact of HRM Practices on Perceived Organizational Performance. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(1), 15–22. <https://doi.org/10.7813/2075-4124.2014/6-5/B.3>
- Heffernan, M., Flood, P., & Liu, W. (2011). High performance work systems—International evidence of the impact on firms and employees. *International Human Resource Management*, 3, 291–342.
- Heffernan, M., Harney, B., Cafferkey, K., & Dundon, T. (2016). Exploring the HRM-performance relationship: the role of creativity climate and strategy. *Employee Relation*, 38(3), 438–462. <https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Heidemeier, H., & Moser, K. (2009). Self-Other Agreement in Job Performance Ratings: A Meta-Analytic Test of a Process Model. *Journal of Applied Psychology*, 94(2), 353–370. <https://doi.org/10.1037/a0015010>
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The Use of Partial Least Squares Path Modeling in International Marketing. *International Journal of Research in Marketing*, 20, 277–319. <https://doi.org/10.1016/j.ijresmar.2009.09.003>
- Heppner, P. P., Cook, S. W., Wright, D. M., & Johnson, W. C. (1995). Progress in resolving problems: A problem-focused style of coping. *Journal of Counseling Psychology*, 42(3), 279.
- Hernaus, T., & Mikulić, J. (2014). Work characteristics and work performance of knowledge workers. *EuroMed Journal of Business*, 9(3), 268–292. <https://doi.org/10.1108/EMJB-11-2013-0054>
- Hill, R. (1998). What Sample Size is "ENOUGH" in Internet Survey Research? *An*

Electronic Journal for the 21st Century, 6(3), 1–10.

Huang, L.-C., Ahlstrom, D., Lee, A. Y.-P., Chen, S.-Y., & Hsieh, M.-J. (2016). High performance work systems, employee well-being, and job involvement: an empirical study. *Personnel Review*, 45(2), 296–314. <https://doi.org/10.1108/PR-09-2014-0201>

Hunter, J. E., Schmidt, F. L., & Jackson, G. B. (1982). Meta-analysis: Cumulating research findings across studies. *Sage Publications, Inc.*, 4.

Huselid, M. A. (1995). The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance. *Academy of Management*, 38(3), 635–672.

Huselid, M. A., & Rau, B. L. (1997). The Determinants of High Performance Work Systems: Cross Sectional and Longitudinal Analyses. *Academy of Management Annual Meetings*.

Ighalo, B. N. (MRS.). (2014). Effects of Innovative Strategies on Tertiary Institution Lecturers's Performance., 3–19.

Isa, A., Zahari, W., & Yusoff, W. (2015). State of Physical Facilities of Higher Education Institutions in Nigeria. *International Journal of Scientific and Research Publications*, 5(4), 1–5.

Isaac, A., Omojola, O., Bukola, B., & Haastrup, T. (2011). Work environment as a correlation of academics staff job performance in South west Nigerian universities. *European Journal of Educational Studies*, 3(1), 1–9.

Isaac, S., & Michael, W. B. (1995). *Handbook in Research and Evaluation: A Collection of Principles, methods and Strategies useful in the planning, design and evaluation of studies in Education and the behavioral Sciences*. Edits Publishers.

Ismail, A. I., Abdul-Majid, A.-H., & Joarder, M.-H. (2017). Filling up the HRM 'Black

- Box?; do creativity and management philosophy matter? *Management Science Letters*, 7, 163–176. <https://doi.org/10.5267/j.msl.2017.1.003>
- Jagero, N., Komba, H. V., & Mlingi, M. N. (2012). Relationship between on the Job Training and Employees' Performance in Courier Companies in Dar es Salaam , Tanzania. *International Journal of Humanities & Social Science*, 2(22), 114–120.
- Jahun, I. S. (2017). *The Roles and Contributions of Nigerian Polytechnics in the Development of Surveying and Geo-informatics Education; Issues, Prospects and Challenges: A Global Perspectives Ibrahim Sa'idu Jahun, fnis, BScE, MSc, RS* Key words; Education, Geo-informatics, Pol.
- Jaja, J.M. (2013). Higer education in Nigeria: Its gain, its burden. *European Journal of Social Science, Arts and Humanities*, 13(14), 7–14.
- James G. Maxham, III, Richard G. Netemeyer, D.R. L. (2008). The Retail Value Chain: Linking Employee Perceptions to Employee Performance, Customer Evaluations, and Store Performance James. *Marketing Science*, 27(2), 147–167. <https://doi.org/10.1287/mksc.1070.0282>
- Jayaram, J., Droge, C., & Vickery, S. K. (1999). The impact of human resource management practices on manufacturing performance. *Journal of Operations Management*, 18, 1–20. Retrieved from www.elsevier.com/locate/dsw
- Jayaweera, T. (2015). Impact of Work Environmental Factors on Job Performance, Mediating Role of Work Motivation: A Study of Hotel Sector in England. *International Journal of Business and Management*, 10(3), 271–278.
- Jehangir, M., Kareem, N., Khan, A., Jan, M. T., & Soherwardi, S. (2011). Effects of job stress on job performance & job satisfaction. *Interdisciplinary Journal of Contemporary Research in Business*, 3(7), 453–465.

- Jerome, N., James, A. N. ., & Yahiya, S. E. (2014). The impact of human resource management on sustainability of employee performance Dr . Jerome Nyameh , Mrs . Altine N . James and Yahiya Salihu Emeji Taraba State University Jalingo, Taraba State Nigeria . Corresponding Author: Dr . Jerome Nyameh ., *Journal of Emerging Trends in Economics and Management Sciences*, 5(7), 83–89.
- Jiang, K., Lepak, D., Hu, J., & Baer, J. (2012). How Does Human Resource Management Influence Organizational Outcomes? A Meta-analytic Investigation of Mediating Mechanisms. *Academy of Management Journal*, 55(6), 1264–1294.
<https://doi.org/doi: 10.5465/amj.2011.0088>
- Jibrin-bida, M., Abdul-majid, A. H., & Ismail, A. I. (2017). Establishing HR practices-employee performance relationship through literature survey. *Journal of Advanced Research in Business and Management Studies*, 1(1), 39–49.
- Joarder, M. H. ., & Ashraf, M.A. (2012). Work Satisfaction and Employee Intentions: An Empirical Study. *East West Journal of Business & Social Studies*, 3, 19–35.
- Joarder, M. H. R., Sharif, M. Y., & Ahmmed, K. (2011). Mediating Role of Affective Commitment in HRM Practices and Turnover Intention Relationship : A Study in a Developing Context. *Business and Economics Research Journal*, 2(4), 135–158.
- Johari, J., Yahya, K. K., & Omar, A. (2009). Examination of the Empirical Dimensionality of Job Performance Construct. *Social and Management Research Journal*, 6(2), 83–110.
- John, K., & Qian, Y. (2003). Incentive features in CEO compensation in the banking industry. In *Economic Policy Review* (pp. 109–121).
- Julious, S. A. (2005). Sample size of 12 per group rule of thumb for a pilot study. *Pharmaceutical Statistics*, 4(4), 287–291. <https://doi.org/10.1002/pst.185>

- Justine, C. (2015). Recruitment Policies in the Nigerian Federal Civil Service and Their Implications on Employees ', 5(3), 34–49.
- Kahya, E. (2007). The effects of job characteristics and working conditions on job performance. *International Journal of Industrial Ergonomics*, 37, 515–523.
- Karanja, A. W. (2015). Organizational Change and Employee Performance: A Case on the Postal Corporation of Kenya. *European Journal of Business and Management*, 7(11), 232–242.
- Karatepe, O. M. (2013). High-performance work practices and hotel employee performance: The mediation of work engagement. *International Journal of Hospitality Management*, 32(1), 132–140.
<https://doi.org/10.1016/j.ijhm.2012.05.003>
- Karatepe, O. M., & Olugbade, O. A. (2016). The mediating role of work engagement in the relationship between high-performance work practices and job outcomes of employees in Nigeria. *International Journal of Contemporary Hospitality Management*, 28(10), 2350–2371. <https://doi.org/10.1108/EL-01-2017-0019>
- Karimi, J.M. N. (2014). Effects of Emotional Intelligence on Employee Performance in the Hotel Industry in Kenya. *International Journal of Business & Management*, 2(12), 216–221.
- Kauhanen, A. (2009). The Incidence of High-Performance Work Systems: Evidence from a Nationally Representative Employee Survey. *Economic and Industrial Democracy*, 30(3), 454–480. <https://doi.org/10.1177/0143831X09336560>
- Keeter, S. (2005). *Survey Research*. In D. Druckman (Ed.), *Doing research: Methods of Inquiry for conflict analysis* 123-162. Thousand Oaks, CA: Sage Publications, Inc.
- Khalid, A., Murtaza, G., Mushtaq, R., Saqib, L., Zafar, A., & Zafar, M.A. (2012). Role

- of Supportive Leadership as a Moderator between Job Stress and Job Performance. *Information Management & Business Review*, 4(9), 487–495. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=87965729&site=ehost-live>
- Khan, A.H., Nawaz, M. M., Aleem, M., & Hamed, W. (2012). Impact of job satisfaction on employee performance: An empirical study of autonomous medical institutions of pakistan. *African Journal of Business Management*, 6(7), 2697–2705. <https://doi.org/10.5897/AJBM11.2222>
- Kim-Soon, N., Ahmad, N., & Ahmad, A. (2014). Moderating effects of work environment on motivation to learn and perceived training transfer: Empirical evidence from a bank. *Australian Journal of Basic and Applied Sciences*, 8(6), 344–361.
- Kim, K. Y., Pathak, S., & Werner, S. (2015). When do international human capital enhancing practices benefit the bottom line? An ability, motivation, and opportunity perspective. *Journal of International Business Studies*, 46(7), 784–805. <https://doi.org/10.1057/jibs.2015.10>
- Kim, Y., Jeon, Y., & Park, J. (2013). 어려움인식간의관계분석 A Study of the Relationship between Teachers ' Efficacy and Difficulties on Job Performance Depended on Self-Esteem of Child Care Teachers, 14(3), 1100–1108.
- Kirkman, B. L., Lowe, K. B., & Young, D. P. (1999). What is a high performance work organization? *Leadership in Action*, 19(2), 13–16.
- Kiruja, E. K., & Kabare, K. (2013). Linking Work Environment with Employee Performance in Public Middle Level TIVET Institutions in Kenya. *International Journal of Advances in Management and Economics*, 2(4), 83–91.

- Klitzman, S., & Stellman, J. M. (1989). The impact of the physical environment on the psychological well-being of office workers. *Social Science & Medicine*, 29(6), 733–742. [https://doi.org/10.1016/0277-9536\(89\)90153-6](https://doi.org/10.1016/0277-9536(89)90153-6)
- Koopmans, L., Bemaards, C. M., Hildebrandt, V. H., Schaufeli, W. B., De Vet, H. C. W., & Van der Beek, A. J. (2013). Development of an individual work performance questionnaire. *International Journal of Productivity and Performance Management*, 62(1), 6–28.
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Schaufeli, W. B., Henrica, C. W. D. V., & Beek, A. J. Van Der. (2011). Conceptual Frameworks of Individual Work Performance A Systematic Review. *Journal of Occupational and Environmental Medicine*, 53(8), 856–866. <https://doi.org/10.1097/JOM.0b013e318226a763>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for reasearch activities. *Educational and Psychological Measurement*, 30, 607–610.
- Kroon, B., Van De Voorde, K., & Timmers, J. (2013). High performance work practices in small firms: A resource-poverty and strategic decision-making perspective. *Small Business Economics*, 41(1), 71–91. <https://doi.org/10.1007/s11187-012-9425-0>
- Krosnick, J. A., & Fabrigar, L. R. (1997). *Designing rating scales for effective measurement in surveys. Survey measurement and process quality.*
- Lance, C. E., Teachout, M. S., & Donnelly, T. M. (1992). Specification of the Criterion Construct Space: An Application of Hierarchical Confirmatory Factor Analysis. *Journal of Applied Psychology*, 77(4), 437–452. <https://doi.org/10.1037/0021-9010.77.4.437>
- Larbi, R. A. (2014). *Relationship Between Organizational Trust, Organizational Justice and Contextual Performance at Electricity Company of Ghana in Accra (Doctoral*

dissertation, University of Ghana).

Leblebici, D. (2012). Impact of work place quality on employees productivity: Case study of a Bank in Turkey., *1*, 38–49.

Ling, S. M., & Bhatti, M. A. (2014). Work Stress and Job Performance in Malaysia Academic Sector: Role of Social Support as Moderator. *British Journal of Economics, Management & Trade Original Research Article British Journal of Economics Management & Trade*, 4(412), 1986–1998.
<https://doi.org/10.9734/BJEMT/2014/12098>

López-Gamero, M., Molina-Azorín, J., & Claver-Cortés, E. (2009). The whole relationship between environmental variables and firm performance: Competitive advantage and firm resources as mediator variables. . . *Journal of Environmental Management*, 90(10), 3110–3121.

Lucky, E. O.-I., & Yusoff, N. B. M. (2013). A Conceptual Framework on Teaching Qualifications, Characteristics, Competence and Lecturer Performance for Higher Education Institutions in Nigeria. *MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT*, 1(3), 35–47.

Macduffie, J. P. (1995). Human Resource Bundles and Manufacturing Performance : Organizational Logic and Flexible Production Systems in the World Auto Industry. *ILR Review*, 48(2), 197–221.

Macky, K., & Boxall, P. (2007). The relationship between ‘ high-performance work practices ’ and employee attitudes: an investigation of additive and interaction effects The relationship between ‘ high- performance work practices ‘ and employee attitudes : an investigation of additive. *International Journal of Human Resource*, 18(4), 537–567. <https://doi.org/10.1080/09585190601178745>

- Madan, P., & Bajwa, J. K. (2016). Human Resource Management Practices and their Impact on the Job Performance of Employees with Special Reference to Banking Sector. *International Journal of Engineering Technology*, 4(4), 2349–4476.
- Malinowski, B. (1922). *Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagoes of Melanesian New Guinea*. New York: EP Dutton & Co.
- Marin-Garcia, J. A., & Tomas, J. M. (2016). Deconstructing AMO framework: A systematic review. *Intangible Capital*, 12(4), 1040–1087. <https://doi.org/10.3926/ic.838>
- Martín-Alcázar, F., Romero-Fernández, P. M., & Sánchez-Gardey, G. (2005). Strategic human resource management: Integrating the universalistic, contingent, configurational and contextual perspectives. *International Journal of Human Resource Management*, 16(5), 633–659. <https://doi.org/10.1080/09585190500082519>
- Mauss, M. (1954). *The gift: forms and functions of exchange in archaic societies*. Routledge.
- Mazzei, M. J., Flynn, C. B., & Haynie, J. J. (2016). Moving beyond initial success: Promoting innovation in small businesses through high-performance work practices. *Business Horizons*, 59(1), 51–60. <https://doi.org/10.1016/j.bushor.2015.08.004>
- McCloy, R. A., Campbell, J.P., & Cudeck, R. (1994). A confirmatory test of a model of performance determinants. *Journal of Applied Psychology*, 79(4), 493–505.
- Mehdi, S. M., Naqvi, R., Bashir, S., Hassan, A., Wikhamn, W., & Garib, G. (2011). Impact of High Performance Work Practices System on Organizational Performance. *Interdisciplinary Journal of Contemporary Research in Business*, 3(8), 197–210.

- Michael, A. (1988). *Handbook of human resource management*.
- Mitchell, D. E., & Nielsen, S. Y. (2012). Internationalization and globalization in higher education. In Globalization-education and management agendas. InTech. *Intechopen.Com*.
- Morgan, L., Chisoro, C., & Karodia, A. M. (2015). An Evaluation of the impact of organizational culture on employee work performance: A case study of a FET. *Arabian Journal of Business and Management Review (OMAN)*, 5(4), 132–175.
- Motowidlo, S. J., & Scotter, J. R. Van. (1994). Evidence That Task Performance Should Be Distinguished From Contextual Performance Evidence That Task Performance Should Be Distinguished From Contextual Performance. *Journal of Applied Psychology*, 79(4), 475–480. <https://doi.org/10.1037/0021-9010.79.4.475>
- Motowidlo, S. J., & Borman, W. C. (1997). A Theory of Individual Differences in Task and Contextual Performance. *Human Performance*, 10(2), 71–83.
- Muda, I., Rafiki, A., & Harahap, M. R. (2014). Factors Influencing Employees' Performance: A Study on the Islamic Banks in Islamic Science University of Malaysia University of North Sumatera. *International Journal of Business and Social Science*, 5(2), 73–81.
- Mundarti, M. (2007). *The influence factors of lecturer performance in implementing teaching learning process in Midwifery Study Program of Magelang – Semarang Health Polytechnic, academic year 2005/2006, Masters thesis, MIKM UNDIP*.
- Murphy, F. C., Michael, I. A., Robbins, T. W., & Sahakian, B. J. (2003). Neuropsychological impairment in patients with major depressive disorder: the effects of feedback on task performance. *Psychological Medicine*, 33, 455–467.
- Musa, M. F., & Baharum, Z. A. (2012). Higher Education Physical Assets and Facilities.

- Procedia Social and Behavioral Sciences*, 50(July), 472–478.
<https://doi.org/10.1016/j.sbspro.2012.08.051>
- Nadarajah, S., Kadiresan, V., Kumar, R., & Nissa, N. (2012). The relationship of hr practices and job performance of academicians towards career development in malaysian private higher institutions. *Social and Behavioral Sciences*, 57, 102–118.
<https://doi.org/10.1016/j.sbspro.2012.09.1163>
- Nadeem, M., AHmad, R., Ahmad, N., & Abdullah, M. (2015). Business and Economics Impact of Human Resource Practices on Female Employees Performance in Karachi Pakistan. *Business and Economics*, 6(2), 13. <https://doi.org/10.4172/2151-6219>.
- Nafei, W. (2015). The Effects of Psychological Capital on Employee Attitudes and Employee Performance: A Study on Teaching Hospitals in Egypt. *International Journal of Business and Management*, 10(3), 249–270.
<https://doi.org/10.5539/ijbm.v10n3p249>
- Naharuddin, N. M. (2013). Factors of workplace environment that affect employees performance: a case study of miyazu malaysia. *International Journal of Independent Research and Studies-IJIRS*, 2(2), 66–78.
- Naidoo, V. (2006). International education: A tertiary-level industry update. *Journal of Research in International Education*, 5(3), 323–345.
<https://doi.org/10.1177/1475240906069455>
- Ndanusa, S. A. (2017). *Northern Nigeria in Perspective: Rethinking the Development Agenda By Being a Key Note Address Presented at the 2017 Edition of the Annual.*
- Ndirangu, M., & Udoto, M. O. (2011). Quality of learning facilities and learning environment. *Quality Assurance in Education*, 19(3), 208–223.
- Newsham, G., Brand, J., Donnelly, C., Veitch, J., Aries, M., & Charles, K. (2009).

- Linking indoor environment conditions to job satisfaction: A field study. *Building Research and Information*, 37(2), 129–147.
<https://doi.org/10.1080/09613210802710298>
- Njambi, C. (2014). *Factors influencing employee motivation and its impact on employee performance: a case of AMREF Health Africa in Kenya* (Doctoral dissertation, United States International University-Africa).
<https://doi.org/10.1017/CBO9781107415324.004>
- Noah, Y., & Steve, M. (2012). Work Environment and Job Attitude among Employees in a Nigerian Work Organization. *Journal of Sustainable Society*, 1(2), 36–43.
- Nura, A. A. (2014). *Human resource management practices and employee performance management nigerian higher educational institutions*.
- Nura, A. A., Hasni, O. N., & Nura, A. A. (2012). A toolkit on effective decision making measurement in organizations. *International Journal of Humanities and Social Science*, 2(4), 296–303.
- Nwanzu, C. L., & OKOLO, O. C. U.-. (2017). Influence of Job Performance among Non-Academic Staff of Delta State Polytechnic, Ogwashi-Uku, Nigeria. *AFRICAN JOURNAL FOR THE PSYCHOLOGICAL STUDY OF SOCIAL ISSUES*, 20(2), 177–187.
- Obisi, C. (2011). Employee Performance Appraisal and Its Implication for Individual and Organizational Growth. *Australian Journal of Business and Management Research*, 1(9), 9297.
- Odunlami, I. B., & Matthew, A. O. (2014). Compensation Management and Employees Performance in the Manufacturing Sector , A Case Study of a Reputable Organization in the Food and Beverage Industry. *International Journal of*

- Managerial Studies and Research*, 2(9), 108–117.
- OECD. (2008). *OECD Annual Report 2008*.
- Ogbonnaya, C., & Valizade, D. (2016). High performance work practices, employee outcomes and organizational performance: a 2-1-2 multilevel mediation analysis. *The International Journal of Human Resource Management*, 1–21. <https://doi.org/10.1080/09585192.2016.1146320>
- Ojimba, D. P. (2012). Vocational and Technical Education in Nigeria: Issues, Problems and Prospects' Dimensions (IPP). *Journal of Educational and Social Research*, 2(9), 23–30. <https://doi.org/10.5901/jesr.2012.v2n9p23>
- Ojokuku, R. . (2013). Effect of Performance Appraisal System on Motivation and Performance of Academics in Nigerian Public Universities. *Australian Journal of Business and Management Research*, 3(3), 20–28.
- Oke, T. I., Ogundele, M. O., & Mainoma, H. M. (2017). Emerging Challenges in Nigerian Teaching Profession: Way Forward Ogundele , Michael Olanrewaju (Ph . D) Mainoma, Hauwa' u Muhammad (Ph . D). *Academic Journal of Interdisciplinary Studies*, 6(1), 149–154. <https://doi.org/10.5901/ajis.2017.v6n1p149>
- Okonjo-Iweala, N., & Osafo-kwaako, P. (2007). Nigeria's Economic Reforms: Progress and Challenges. *SSRN Electric Journal*, 2–28. <https://doi.org/10.2139/ssrn.1080251>
- Okoye, R., & Arimonu, M. O. (2016). Technical and Vocational Education in Nigeria: Issues , Challenges and a Way Forward. *Journal of Education and Practice*, 7(3), 113–118.
- Ifeyinwa B. Okoye, Francisca C. Mbagwu, Rosemary Abanum & Ngozi Nwohiri (2019). Influence of Performance Appraisal on Job Performance of Librarians in Academic Libraries in South East, Nigeria

- Oluigbo, I., & Anyiam, K. (2014). The Role Of Compensation On Employee Performance In An Information Technology Organization. *International Journal of Research in Information Technology*, 2(4), 548–558.
- Onoyase, A. (2017). Motivation and Job Performance of Lecturers of Tertiary Institutions in Nigeria: Implication for Counseling. *World Journal of Educational Research*, 4(2), 280–289. <https://doi.org/10.22158/wjer.v4n2p280>
- Onuka, A. O. U., & Ajayi, K. O. . (2012). Effects of Manpower Development on Workers ' Job Performance. *European Journal of Educational Studies*, 4(3), 423–433.
- Ortín-Ángel, P., & Salas-Fumás, V. (2007). Compensation dispersion between and within hierarchical levels. *Journal of Economics and Management Strategy*, 16(1), 53–79. <https://doi.org/10.1111/j.1530-9134.2007.00132.x>
- Oseni, A. L. (2011). *The Fallen Standard of Education in Nigeria Lecturers Contributed*. Retrieved from: <http://www.articlesbase.com/college-and-university-articles/the-fallen-standard-o-f-education-in-nigeria-lecturerscontributed-5147998.html>.
- Osterman, P. (1994). Supervision, Discretion, and Work Organization. *The American Economic Review*, 84(2), 380–384.
- Osterman, P. (2006). The Wage Effects of High Performance Work Organization in Manufacturing. *ILR Review*, 59(2), 187–204.
- Owoyemi, D. (Mrs) O., & George, D. O. (2013). The use Performance Appraisal System in Enhancing Employeesâ€™ Performance in a Public Sector Agency in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 3(10), 240–249. <https://doi.org/10.6007/IJARBS/v3-i10/294>
- Paauwe, J. (2009). HRM and Performance: Achievements,. *Journal of Management Studies*, 129–142.

- Pak, J., & Kim, S. (2016). Team Manager's Implementation, High Performance Work Systems Intensity, and Performance. *Journal of Management*, XX(X), 1–26. <https://doi.org/10.1177/0149206316646829>
- Paulo Santiago, Karine Tremblay, Ester Basri Arna, and E. (2008). *Tertiary Education for the Knowledge Society* (Vol. 2).
- Pihie, Z. A. L., & Elias, H. (2004). Improving the Teaching Profession Through Understanding Educators' Self Motivation. *Pakistan Journal of Psychological Research*, 19(1–2), 25–35.
- Polit, D. F., & Beck, C. T. (2006). The Content Validity Index: Are You Sure You Know What 's Being Reported? Critique and Recommendations. *Research in Nursing & Health*, (29), 489–497. <https://doi.org/10.1002/nur>
- Posthuma, R. A., Campion, M. C., Masimova, M., & Campion, M. A. (2013). *A High Performance Work Practices Taxonomy: Integrating the Literature and Directing Future Research*. *Journal of Management* (Vol. 39). <https://doi.org/10.1177/0149206313478184>
- Pradhan, S., & Pradhan, R. K. (2015). An Empirical Investigation of Relationship among Transformational Leadership, Affective Organizational Commitment and Contextual Performance. *Vision: The Journal of Business Perspective*, 19(3), 227–235. <https://doi.org/10.1177/0972262915597089>
- Presser, S. &. (1981). *Questions and Answers in Attitude Surveys*, New York: Acad.
- Pritchard, R. D., Ashwood, E., & Weaver, S. J. (2012). *Evidence-based productivity improvement: A practical guide to the Productivity Measurement and Enhancement System (ProMES)*. Routledge.
- Punch, K. (2005). *Introduction to social research*. London: Sage Publications.

- Punia, B., & Garg, N. (2012). High Performance Work Practices in Indian Organizations: Exploration and Employees' Awareness. *Asia Pacific Journal of Management Research and Innovation*, 8(4), 509–516. <https://doi.org/10.1177/2319510X13481913>
- Punia, B. K., & Garg, N. (2015). High Performance Work Practices: A Study of Variations Based on Personal Characteristics. *Annual HR Journal*, 5, 37–55.
- Purcell, J., Kinnie, N., & Hutchinson, S. (2003). *Understanding the people and performance link: unlocking the black box*. London: chartered institute of personnel and development.
- Quartey, S. H., & Attiogbe, E. J. (2013). Is there a link between compensation packages and job performance in the Ghana police service? *African Journal of Business Management*, 7(44), 4398–4406. <https://doi.org/10.5897/AJBM2013.7201>
- Rahman, M. S., Ferdausy, S., & Karan, R. (2013). Assessing the relationships between components of emotional intelligence and job performance: An empirical study. *ABAC Journal*, 33(1), 1–9.
- Rahman, S., Ferdausy, S., & Karan, R. (2012). Relationship among emotional intelligence, deviant workplace behavior and job performance: An empirical study. *Portuguese Journal of Management*, XVII(1), 39–62.
- Rahman, S., Ferdausy, S., & Karan, R. (2015). Determining the Relationships Between the Components of Organizational Commitment and Job Performance: an Empirical Study. *ABAC Journal*, 35(1), 30–45.
- Rasheed, M. I., Aslam, H. D., & Sarwar, S. (2010). Motivational Issues for Teachers in Higher Education: A Critical Case of IUB. *Journal of Management Research*, 2(2), 1–23. <https://doi.org/http://dx.doi.org/10.5296/jmr.v2i2.349>

- Rasool, B. N., & Nouman, M. (2013). Measuring the Extent of a High Performance Work System: A Mixed Methodology Approach. *Pak J Commer Soc Sci Pakistan Journal of Commerce and Social Sciences*, 7(3), 628–645.
- Reddy, D. M., Prasad, K. V. N., Saha, S., Kulkarni, A., & Chandra Sekhar, S. F. (2012). Innovative Financing Options for Renewable Energy Projects Employee Productivity in Selected IT Companies in Pune Region. *SuGyaan*, IV(1). Retrieved from <http://ssim.ac.in/sugyaan-journals/Sugyaan-Jan-June-12-7-min.pdf#page=67>
- Resnick, M. L., & Zanotti, A. (1997). Using Ergonomics to Target Productivity Improvements. *Computers Industrial Engineering*, 33(1–2), 185–188.
- Roldán, J. L., & Sánchez-Franco, M. J. (2012). *Variance-based structural equation modeling: guidelines for using partial least squares. Research methodologies, innovations and philosophies in software systems engineering and information systems*.
- Rosano, C., Newman, A. A. B., Katz, A. R., & Hirsch, C.H. (2008). Association between lower digit symbol substitution test score and slower gait and greater risk of mortality and of developing incident disability in well-functioning older adults. *Journal of the American Geriatrics Society*, 56(9), 1618–1625. <https://doi.org/10.1111/j.1532-5415.2008.01856.x>
- Rothstein, H. R. (1990). Interrater reliability of job performance ratings: Growth to asymptote level with increasing opportunity to observe. *Journal of Applied Psychology*, 75(3), 322.
- Rotundo, M., & Sackett, P. R. (2002). The Relative Importance of Task , Citizenship , and Counterproductive Performance to Global Ratings of Job Performance: A Policy-Capturing Approach. *Applied Psychology*, 87(1), 66–80.

<https://doi.org/10.1037//0021-9010.87.1.66>

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 67, 54-67.

<https://doi.org/10.1006/ceps.1999.1020>

Saeed Pirzada, D., Hayat, F., Ali Ikram, A., Ayub, M., & Waheed, K. (2013). Impact of Human Resources Management Practices on Turnover, Productivity and Corporate Financial Performance. *European Journal of Business and Management*, 5(10), 163-176.

Saithong-in, Supapan; Ussahawanitchakit, P. (2016). Psychological capital and job performance: an empirical research of certified public accountants (CPAs) in Thailand. *Business and Management Review*, 7(5), 499-506.

Saleem, I., & Khurshid, A. (2014). Do Human Resource Practices affect Employee Performance? *Pakistan Business Review*, 15(4), 669-688.

Salkind, N. J. (2003). *Exploring research (5th ed.)*. USA: ISBN-10: 0130983527.

Salkind, N. J. (1997). (1997). *Exploring research (3rd.)* (3rd ed.). Upper Saddle River, N. J: Prentice Hall.

Samuel, L., Kwapong, A., Opoku, E., & Donyina, F. (2015). The Effect of Motivation on the Performance of Teaching Staff in Ghanaian Polytechnics: the Moderating Role of Education and Research Experience. *Global Journal of Human Resource Management*, 3(6), 30-43.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students. 5th Ed.* Harlow, Essex: Pearson Education.

Seidu, Y. (2011). *Human resource management and organizational performance: Evidence from the retail banking sector. Doctoral Thesis submitted to Aston*

University, United Kingdom.

- Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach (5th ed.)*. Chichester: John Willey and Sons Ltd. (2010). *Research methods for business: A skill building approach (5th ed.)*. Chichester: John Willey and Sons Ltd.
- Shah, M. J. (2012). Job Satisfaction and Motivation of Teachers of Public Educational Institutions. *International Journal of Business and Social Science*, 3(8), 271–282.
- Shin, D., & Konrad, A. M. (2017). Causality Between High-Performance Work Systems and Organizational Performance. *Journal of Management*, 43(4), 973–997. <https://doi.org/10.1177/0149206314544746>
- Sonnentag, S., & Frese, M. (2002). Performance concepts and performance theory. *Psychological Management of Individual Performance*, 23(1), 3–25.
- Subekti, A., & Setyadi, D. (2016). The Implication of Financial Compensation and Performance Appraisal System to Job Satisfaction And Motivation also Employee Performance In PT Pupuk Kalimantan Timur Indonesia. *International Journal of Business and Management Invention*, ISSN: 2319-801X, e-ISSN: 2319-8028, 5(2), 16–27. <https://doi.org/2319-8028>
- Sujarwo, E., Cicihratnasih, & Sodikin, A. (2018). The Effect of Organizational Culture and Environmental Work on Employee Performance Through Organization Commitment Pt.Ciwangi Berlian Motor. *International Journal of Business and Applied Social Science (IJBASS)*, 4(5), 14–27. Retrieved from <http://ijbassnet.com/>
- Suliman, A., & Harethi, B. Al. (2013). Perceived work climate and employee performance in public security organizations in the UAE. *Transforming Government: People, Process and Policy*, 7(3), 410–424.

- Sultana, A., Irum, S., Mahmood, Ahmed, K., & Nasir. (2012). "Impact of Training on Employee Performance: A Study of Telecommunication Sector in Pakistan", *Interdisciplinary Journal of Contemporary Research in Business*, 4(6), 646–661.
- Sutton, G. P., Barchard, K. A., Bello, D. T., Thaler, N. S., Ringdahl, E., Mayfield, J., & Allen, D. N. (2011). Beery-Buktenica Developmental Test of Visual-Motor Integration Performance in Children With Traumatic Brain Injury and Attention-Deficit/Hyperactivity Disorder. *Psychological Assessment*, 23(3), 805–809. <https://doi.org/10.1037/a0023370>
- Swathi, B. (2013). Intervention Research on Working Conditions and Employee Performance. *International Monthly Refereed Journal of Research in Management and Technology*, II, 146–152.
- Tabiu, A., Pangil, F., & Othman, S. Z. (2016). Examining the link between HRM Practices and Employees' performance in Nigerian public sector. *Management Science Letters*, 6, 395–408.
- Taiwo, A. S. (Covenant U. (2010). The influence of work environment on workers productivity: A case of selected oil and gas industry in. *African Journal of Business Management*, 4(March), 299–307.
- Tastan, S. B. (2014). The Impact of Employee-Organization Relationship on Individuals' Behavioral Outcomes of Task-Related Performance, Contextual Performance and Intention to Turnover: An Evaluation with Social Exchange Theory. *INTERNATIONAL JOURNAL OF BUSINESS AND MANAGEMENT STUDIES*, 6(1), 42–53.
- Tessema, M. T., & Soeters, J. L. (2006). Practices and challenges of converting former fighters into civil servants: The case of Eritrea. *Public Administration and*

- Development*, 26(4), 359–371.
- Tiwari, P. (2011). Impact of Selected HRM Practices on Perceived Employee Performance: An Empirical Study. *Global Management Journal*, 3(1), 37–43.
- Truss, C., Mankin, D., & Kelliher, C. (2012). *Strategic human resource management*. Oxford University Press.
- Truss, C. (2001). Complexities and Controversies in Linking HRM with Organizational Outcomes. *Journal of Management Studies*, 38(8), 1121–1149.
- Tsui, A. S., Pearce, J. I., & Tripoli, A. M. (1997). Alternative Approaches to the Employee-Organization Relationship: Does Investment in Employees Pay off? *Academy of Management Journal*, 40(5), 1089–1121.
- Tutar, H., Altinoz, M., & Cakiroglu, D. (2011). The effects of employee empowerment on achievement motivation and the contextual performance of employees. *African Journal of Business Management*, 5(15), 6318–6329.
- Ugbombe, U. O., Nosakhare, Osagie, G., & U. Egwu, P. E. (2015). Impact of training and development on employee performance in selected public sector organizations. *Indian Journal of Commerce & Management Studies*, 7(3), 48–55.
- Ukpai, U. I. (2015). *Polytechnic Education for All (Pefa): Problems and Prospects*. Academic Excellence.
- Ulrich, D. (1997). Measuring Human Resource: An Overview of Practice and Prescription for Results. *Human Resource Management*, 36(3), 303–320.
- Utomi, J.-M. (2018, July 2). 2018 Budgetary Allocation to Education. *Nigerian Thisday Newspaper*. Retrieved from <https://www.thisdaylive.com/index.php/2018/07/02/2018-budgetary-allocation-to-education/>

performance?. *Ann Arbor*, 1001, 48109-1234.

Walsworth, S., & Verma, A. (2007). Globalization, human resource practices and innovation: Recent evidence from the Canadian workplace and employee survey. *Industrial Relations*, 46(2), 222–240. <https://doi.org/10.1111/j.1468-232X.2007.00466.x>

Wang, H.jiang, Lu, C. qin, & Lu, L. (2014). Do people with traditional values suffer more from job insecurity? The moderating effects of traditionality. *European Journal of Work and Organizational Psychology*, 23(1), 107–117. <https://doi.org/10.1080/1359432X.2012.712751>

Werner, S. (2011). High performance work systems in the global context: A commentary essay. *Journal of Business Research*, 64(8), 919–921. <https://doi.org/10.1016/j.jbusres.2010.09.002>

White, M., Hill, S., McGovern, P., Mills, C., & Smeaton, D. (2003). 'High-performance' Management Practices, Working Hours and Work –Life Balance. *British Journal of Industrial Relations*, 41(2), 175–195.

Wilson, J. (2010). *Essentials of business research -A guide to doing your research project* new Delhi: SAGE Publications India Pvt Ltd.

Wisecarver, M. M., Carpenter, T. D., & Kilcullen, R. N. (2007). Capturing interpersonal performance in a latent performance model. *Military Psychology*, 19(2), 83–101. <https://doi.org/10.1080/08995600701323376>

Wood, S., Nolte, S., BurrIDGE, M., Rudloff, D., & Green, W. (2015). Dimensions and location of high-involvement management: fresh evidence from the UK Commission's 2011 Employer Skills Survey. *Human Resource Management Journal*, 25(2), 166–183.

- Wood, S., & Albanese, M. T. (1995). Can We Speak of a High Commitment Management on the Shop Floor?*. *Journal of Management Studies*, 32(2), 215–247.
<https://doi.org/10.1111/j.1467-6486.1995.tb00341.x>
- Yang, L. Q., Johnson, R. E., Bauer, J., Groer, M. W., & Salomon, K. (2014). Physiological mechanisms that underlie the effects of Interactional unfairness on deviant behavior: The role of cortisol activity. *Journal of Applied Psychology*, 99(2), 310–321.
<https://doi.org/10.1037/a0034413>
- Yassin, A., Ali, S., Ali, A. A., & Adan, A. A. (2013a). Working Conditions and Employees' Productivity in Manufacturing Companies in Sub-Saharan African Context: Case of Somalia. *Educational Research International Educational Research International Educational Research International Educational Research International ISSN-L*, 2(2), 2307–3713.
- Yassin, A., Ali, S., Ali, A. A., & Adan, A. A. (2013b). Working Conditions and Employees' Productivity in Manufacturing Companies in Sub-Saharan African Context: Case of Somalia. *International Journal of Educational Research*, 2(2), 2307–3713.
- Yousaf, A., Yang, H., & Sanders, K. (2015). Effects of intrinsic and extrinsic motivation on task and contextual performance of Pakistani professionals: The media *Journal of Managerial Psychology*, 30(2), 133–150. <https://doi.org/10.1108/JMP-09-2012-0277>
- Yusuf, H. A., & Ogbudinkpa, C. I. (2017). Relationship between Performance Appraisal Criteria and Lecturers "Productivity in Universities in South-West Geo-Political Zone.". *Asia Pacific Journal of Education, Arts and Sciences*, 4(2), 79–86.
- Zakari, M., Poku, K., & Owusu-Ansah, W. (2013). Organizational Culture and

- Organisational Performance: Empirical Evidence from the Banking Industry in Ghana. *International Journal of Business, Humanities and Technology*, 3(1), 95–107.
- Zhang, M., Di Fan, D., & Zhu, C. J. (2014). High-Performance Work Systems, Corporate Social Performance and Employee Outcomes: Exploring the Missing Links. *Journal of Business Ethics*, 120(3), 423–435. <https://doi.org/10.1007/s10551-013-1672-8>
- Zhang, Y. C., & Li, S. L. (2009). High performance work practices and firm performance: Evidence from the pharmaceutical industry in China. *International Journal of Human Resource Management*, 20(11), 2331–2348. <https://doi.org/10.1080/09585190903239690>
- Zikmund, W. G. (2013). *Basic and Applied Research. Business Research Methods*. Retrieved from <http://amzn.com/0030350840>
- Zohurul, I., & Siengthai, S. (2010). Human Resource Management Practices and Firm Performance Improvement in Dhaka Export Processing Zone (DEPZ). *Research and Practice in Human Resource Management*, 18(1), 60–77.

APPENDICES

Appendix 1: Research Questionnaire



UUM

Universiti Utara Malaysia

School of Business Management,
Universiti Utara, Malaysia,
06010 Sintok, Kedah, Malaysia
Phone: (+604)
E-mail: sbm@uum.edu.my

Dear Respondent,

ACADEMIC REASERCH QUESTIONNAIRE

I am a PhD. student, currently conducting a survey as part of a PhD research on High Performance Work Practices-Job Performance relationship. The aim of this study is to determine the effects of selected HR practices on the lecturers' performance in the Northwest Nigerian Polytechnics. The information you provide will lead to the achievement of objectives of this research.

The survey is divided into four (4) sections. There are no rights or wrong answers. It will be highly appreciated if you honestly respond to all the questions in the sections, and return it to the assigned survey enumerator. Your responses will help in the data analysis section of this research.

All information provided will be treated as confidential. It will be solely used for academic purposes.

Thanks for your anticipated cooperation.

Best Regards,

Umar Abdullahi Abboh

PhD (HRM) Candidate,

School of Business Management,

College of Business (COB)

Universiti Utara Malaysia (UUM),

06010 Sintok, Kedah, Malaysia

Tel: (+234) 8060500197/+601157803013

E-mail: auabbob@gmail.com

Please read each of the following items and indicate whether you agree or disagree with each of the given statement. Please indicate by circling (O).

The questionnaire is rated using a 5 point Likert scale below. And the following options SD= strongly disagree, D= disagree, N= neutral, A=agree and SA= strongly agree.

Section 1: Job Performance

S/No	Statements	SD	D	N	A	SA
01	My quantity of work is higher than average.	1	2	3	4	5
02	My quality of work is much higher than average.	1	2	3	4	5
03	My efficiency is much higher than average.	1	2	3	4	5
04	My standard of work quality is higher than the formal standard of this job.	1	2	3	4	5
05	I strive for higher quality of work than required.	1	2	3	4	5
06	I uphold the highest professional standard.	1	2	3	4	5
07	I can perform core job tasks.	1	2	3	4	5
08	I judge when performing core job tasks.	1	2	3	4	5
09	I accurately perform core job task.	1	2	3	4	5
10	My job knowledge concerning core job tasks.	1	2	3	4	5
11	I use creativity when performing my core tasks.	1	2	3	4	5
12	I comply with instructions even when supervisors are not present.	1	2	3	4	5
13	I cooperate with others in the team.	1	2	3	4	5
14	I persist to overcome obstacles to complete a task.	1	2	3	4	5
15	I display proper appearance and bearing.	1	2	3	4	5
16	I volunteer for additional duty.	1	2	3	4	5
17	I follow proper procedures and avoid unauthorized shortcuts.	1	2	3	4	5
18	I look for challenging assignment.	1	2	3	4	5
19	I offer to help others accomplish their work.	1	2	3	4	5
20	I pay close attention to important details.	1	2	3	4	5
21	I defend the supervisor's decisions.	1	2	3	4	5
22	I render proper business courtesy.	1	2	3	4	5
23	I support and encourage a coworker with a problem.	1	2	3	4	5
24	I take the initiative to solve a work problem.	1	2	3	4	5
25	I exercise personal discipline and self-control.	1	2	3	4	5
26	I tackle a difficult work assignment enthusiastically.	1	2	3	4	5

27.

I voluntarily do more than the job requires to help others
or contributes to organizational effectiveness

2

3

4

5

Section 2: High Performance Work Practices

S/No	Statements	SD	D	N	A	SA
01	I can use knowledge and behaviors learned in training at work.	1	2	3	4	5
02	My polytechnic helps me develop the skills I need for the successful accomplishment of my duties (e.g., training, conferences, etc.).	1	2	3	4	5
03	My polytechnic invests in my development and education promoting my personal and professional growth in a broad manner (e.g., full or partial sponsorship of undergraduate degrees, postgraduate programs, language courses etc.).	1	2	3	4	5
04	My polytechnic training is evaluated by participants.	1	2	3	4	5
05	My polytechnic stimulates learning and application of knowledge.	1	2	3	4	5
06	My polytechnic training needs are identified periodically.	1	2	3	4	5
07	My polytechnic treats me with respect and attention.	1	2	3	4	5
08	My polytechnic is concerned with my well-being.	1	2	3	4	5
09	My polytechnic, there is an environment of understanding and confidence between managers and employees.	1	2	3	4	5
10	My polytechnic recognizes the work I do and the results I achieve (e.g., in oral compliments, in articles in corporate bulletins, etc.).	1	2	3	4	5
11	My polytechnic favors autonomy in doing tasks and making decisions.	1	2	3	4	5
12	My polytechnic seeks to meet my needs and professional expectations.	1	2	3	4	5
13	My polytechnic employees and their managers enjoy constant exchange of information in order to perform their duties properly.	1	2	3	4	5
14	My polytechnic encourages my participation in decision-making and problem-solving.	1	2	3	4	5
15	My polytechnic, there is an environment of trust and cooperation among colleagues.	1	2	3	4	5
16	My polytechnic encourages interaction among its employees (e.g., social gatherings, social events, sports events, etc.).	1	2	3	4	5
17	My polytechnic follows up on the adaptation of employees to their functions.	1	2	3	4	5
18	My polytechnic, there is a consistency between discourse and management practice.	1	2	3	4	5
19	My polytechnic discusses competency-based performance appraisal criteria and results with its employees.	1	2	3	4	5
20	My polytechnic competency-based performance appraisal provides the basis for an employee development plan.	1	2	3	4	5

21.	My polytechnic, competency-based performance appraisal is the basis for decisions about promotions and salary increases.	1	2	3	4	5	
22.	My polytechnic disseminates competency-based performance appraisal criteria and results to its employees.	1	2	3	4	5	
23.	My polytechnic periodically conducts competency-based performance appraisals.	1	2	3	4	5	
24.	In my polytechnic I get incentives such as promotions, commissioned functions, awards, bonuses, etc.	1	2	3	4	5	
25.	In my polytechnic, my salary is influenced by my results.	1	2	3	4	5	
26.	My polytechnic offers me a salary that is compatible with my skills, training, and education	1	2	3	4	5	
27.	My polytechnic remunerates me according to the remuneration offered at either the public or private marketplace levels.	1	2	3	4	5	
28.	My polytechnic considers the expectations and suggestions of its employees when designing a system of employee rewards.	1	2	3	4	5	
29.	In my polytechnic information is disseminates about both external and internal recruitment processes.	1	2	3	4	5	
30.	In my polytechnic information is disclosed to applicants regarding the steps and criteria of the selection process.	1	2	3	4	5	
31.	In my polytechnic performance results is communicated to candidates at the end of the selection process.	1	2	3	4	5	
32.	In my polytechnic, selection tests are conducted by trained and impartial people.	1	2	3	4	5	
33.	In my polytechnic, there are competitive selection processes that attract competent people.						
34.	In my polytechnic, various selection instruments (e.g., interviews, tests, etc.) are used.	1	2	3	4	5	

Section 3: Physical Working Condition

S/No	Statements	SD	D	N	A	SA	
01	In my polytechnic the facilities are adequate	1	2	3	4	5	
02	In my polytechnic the building is a comfortable place to be	1	2	3	4	5	
03	In my polytechnic the building is pleasing in appearance	1	2	3	4	5	
04	In my polytechnic there is adequate space for academic activities	1	2	3	4	5	
05	In my polytechnic classroom equipment and furniture are in disrepair	1	2	3	4	5	
06	In my polytechnic the facilities are lacking in regular maintenance	1	2	3	4	5	
07	In my polytechnic the building is neat and clean	1	2	3	4	5	

Section 4: Demographic Information

Please check/select the most appropriate option that BEST describe your situation.

8. Name of school

9. Age

- a) 20-25
- b) 26-30
- c) 31-35
- d) 36-40
- e) 40 and Above

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

10. Marital status

- a) Single
- b) Married
- c) Others

<input type="checkbox"/>
<input type="checkbox"/>

11. Gender

- a) Male
- b) Female

<input type="checkbox"/>
<input type="checkbox"/>

12. Highest educational level

- a) HND/ Degree
- b) PGD/ Master
- c) PhD
- d) Others, specify

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

13. Level of position

- a) Lecturer III
- b) Lecturer II
- c) Lecturer I
- d) Senior Lecturer
- e) Principal Lecturer
- f) Chief Lecturer

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

14. Year of service in current polytechnic

- a) 2-5 years
- b) 6-10
- c) 11-15
- d) 16-20
- e) 21-25
- f) 26 and Above

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Appendix 2

Publications from the Ph.D. research

1. Umar Abdullahi Abboh, Abdul Halim Abdul Majid, Hafeez Fareed (2019):HR Practices' Effect on Lecturers' Job Performance in Nigerian HEIs.International Journal of Advances in Management and Economics. Volume 8 Issue 4 55-66, ISSN: 2278-3369.
2. Umar Abdullahi Abboh, Abdul Halim Abdul Majid, Hafeez Fareed (2019):Examining the Effect of HR Practices on Job Performance in Nigerian Polytechnics. ~~International Journal of Economics, Commerce and Management. Volume: 7,~~ issue 9, 98-115 ISSN: 2348 0386
3. Umar Abdullahi Abboh, Abdul Halim Abdul Majid, Hafeez Fareed (2019) HPWPs- Lecturers' Performance Connection: Does Working Condition Matter(Unpublished)
4. Umar Abdullahi Abboh, Abdul Halim Abdul Majid, Hafeez Fareed (2019): Moderating Effect of Working Condition on HR 'Best Practices'-Job Performance Relationship (Unpublished)

Appendix 3

Literature Matrix Summary

Matrix of Some Selected Previous Studies on HPWS/HPWPs

S/N	Author/Year	Aim	IV	DV	Moderator/Mediation	Context	Theory	Positive Findings relationship (Reciprocal)	Suggestions/future Research
1.	Pak & Kim (2016)	To examine Team Manager's Implementation, HPWS Intensity, and Performance: A Multilevel Investigation	HPWS	Performance: Team Performance Employee Performance		Korea	Social exchange theory		Thus, future studies can utilize a longitudinal design for a higher response rate with a larger sample. Also, future research is needed to explore this suggested area of research. Again, future research in this area will deepen our understanding of team managers' HR responsibility in improving performance of teams.
2.	Pongpeachan (2016)	To investigate the Effect of Transformational Leadership and HPWS on High Performance Work	Transformational Leadership and HPWS	Job Motivation and Task Performance		Thailand Universities			

		System on Job Motivation and Task Performance							Positive relationship	
3.	Iyanda, Abdeirahman & Abdul-Majid (2018)	To investigate the closing strategic human resource management research lacunas with mediating role of employee creativity in Nigerian Firms.	HPWS: Selective hiring, *training & development, *performance appraisal, *pay for performance *succession planning.	Organizational output: Financial & Non-Financial Performance	Employee Creativity	Nigeria	Resource-Based View Theory (Wade & Hulland, 2004).			Future studies should investigate employees' perspective regarding HPWS and firm performance which will constitute a viable research direction. For the reason that examining employees' perspectives on HPWS-performance relationship will expand the understanding and enrich the body of knowledge in the research field.
4.	Jyoti & Dev (2016)	To examine the role of self-efficacy between high-performance work system (HPWS) and	HPWS: Ability, Motivation & Opportunity	Employee performance	Mediation Self-efficacy Moderation Learning orientation.	India	AMO Theory			Longitudinal designs are needed in future research to extend the findings. Secondly, the data were collected from the service sector only. It

5.	Li & Yu (2017)	To investigate the influence of HPWS on organizational citizenship behavior and verified the mediating role of psychological contract and the moderating effect of Chinese traditionality	HPWS	OCB	China	Mediator: psychological contract Moderator: Chinese traditionality	Social Exchange Theory	Positive relationship	should be helpful to replicate these findings in other sectors to enhance its generalizability. Study of the negative effect of HPWS on employees is still in the exploratory stage with little empirical evidence, and need more and deeper research. Second, Future research should consider the longitudinal study of different time points, and combine it with the horizontal research, which will help to better describe the internal relations between variables.
6.	Carvalho & Chambel (2015)	To examine the impact of HPWS and Subjective Well-Being with the mediating effect of	HPWS	Subjective Well-Being	Portugal	Mediators: Work-to-Family Balance and Well-Being at Work	Conservation of Resource Theory	Mixed result between HPWS & Subjective Well-Being	The study focused on HPWS relationship with employees' well-being, which is an area that has needed more empirical research

		Work-to-Family Balance and Well-Being at Work								(Kroon et al., 2009; Zhang et al., 2013). Future studies should analyze this model with the introduction of family-friendly practices to conclude whether the presence of HPWS is also important for creating a more family-friendly environment.
7.	Elorza et al. (2015)	To understand how management and employee perspectives of HPWS relate to employee discretionary behavior in manufacturing industry.	HPWS	Employee discretionary behavior			Northern Spain	Attribution theory (Nishii et al., 2008),	Positive relationship	Future research from a longitudinal perspective is therefore required to determine the causal status of the variables examined in this study.
8.	Escrivá Carda, Balbastre-Benavent & Canet-Giner (2016)	To investigate the employees' perceptions of HPWS on	HPWS	Innovative behavior			Spain		Positive relationship	

11.	Rasool & Nouman (2013)	employees in Nigeria	HPWS: Training, compensation, Recruitment & Selection, Employee Participation & Empowerment, Information Sharing, performance management, promotion, Teams, Information Sharing, job design, performance appraisal	Performance		Pakistan	Universalistic, contingent and resource-based theories	Positive effect	Future, studies can use the Total Strategic Resource Approach (TSRA) to measure human resources in studies examining HR's effect on firm performance in the Pakistani context.
12.	Huang, Fan, Su & Wu (2018)	To examine relationship between HPWS and employees' attitudes and behaviors'	HPWS	Work engagement t: Employees' attitudes and behaviors'	Mediators: challenge-related and hindrance-related stressors	China	conservation of resources theory	Positive relationship	future studies should be undertaken in a cross-cultural context, and examine the mechanism proposed by our study in a multiple-Country design or in a context of multinational

13.	Mihail & Kloutsinioti (2016)	To examine the effects of HPWS on employees' work-related wellbeing, such as emotional exhaustion, work engagement and consequently their job satisfaction.	HPWS:	employees' work-related wellbeing, (Such as emotional exhaustion, work engagement and consequently their job satisfaction).	Greece	Social exchange theory	Positive relationship	corporations that have working teams with team members from various cultural backgrounds. Future studies can pay attention to the influence of a wider range of diverse industries and geographic differences on employees or their collective outcomes. Hence, and taking into consideration that the resulting occupational groups under study were small in size, future studies could clarify the HPWS effect on different occupational groups. Also, future research could examine the mediating role of social (and economic) exchange in the relationships between HPWS
-----	------------------------------	---	-------	---	--------	------------------------	-----------------------	---

										accurate cross-level predictions. More research is also needed to better understand the HPWP and employee performance relationship in more context-specific work environments such as the police force, the fire service, and social services.
15.	Shin & Conrad (2014)	To investigate the Causality Between HPWS and Organizational Performance	HPWS: Training, Empowerment, Compensation, Benefit and Work Design.	Performance			Canada	systems theory perspective (Von Bertalanffy, 1968)	Positive relationship	
16.	Zhike & Xu (2016)	To investigate the effects of psychological contract breach (PCB), person-organization fit (P-O fit) and high-performance	psychological contract breach (PCB), person-organization fit (P-O fit) and high-performance	Employee Engagement			China	Social exchange theory		future studies can separate HPWS following the job demand resource model to clarify how HPWS should be understood and how organizations can implement HPWS in a reasonable way.

17.	Zhang, Fan, & Zhu (2014)	To investigate the High-Performance Work Systems, Corporate Social Performance and Employee Outcomes	HPWS, Corporate Social Performance	Employee Outcomes: organizational commitment and organizational citizenship behavior (OCB)	China	social identity theory (Tajfel and Turner 1986) & Social exchange theory	Positive relationship	Future research should develop and test explanations for
18.	Voorde & Beijer (2014)	To examine role of employee HR attributions	HPWS	Employee outcomes: *Commitment	Mediator: Employee HR attributions	attribution theory (Kelley, 1967;		Future research should develop and test explanations for



19.	in the relationship between high-performance work systems and employee outcomes		* Job strain						why each of these three HPWS bundles affects HR attributions. Also, future studies could investigate the effect of other work-related factors on HR attributions, like leadership style and history of employment relations. Future research to focus on how combinations of these two HR attributions are related to outcomes.
	Jiang & Liu (2015)	To examine High performance work systems and organizational effectiveness: The mediating role of social capital	HPWS: * Selective staffing * Self-management team * Decentralized decision making * Formalized training	Organizational effectiveness: * Favorable interpersonal environment * Knowledge transfer	Mediator: Social capital		Bowen and Ostroff, 2004) & social exchange Theory		

20.	Fabi, Lacoursière & Raymond (2014)	To determine the Impact of high-performance work systems on job satisfaction, organizational commitment, and intention to quit in Canadian organizations	<ul style="list-style-type: none"> * Flexible work assignment * Open communication * Group-based and performance-contingent compensation 	<ul style="list-style-type: none"> * Intention to quit 	<ul style="list-style-type: none"> * Mediators: <ul style="list-style-type: none"> * Job satisfaction * organizational commitment 	Canada	Social exchange theory	Given the nature of the study's sample, it would be interesting to extend this research with a sample that includes a larger number of organizations, so as to verify whether the impact of a HPWS varies according to different organizational contexts (say in large enterprises vs SMEs). It would also be interesting for future research to include performance variables such as
-----	------------------------------------	--	---	---	---	--------	------------------------	--

21.	Huang et al. (2015)	To investigate the impact of HPWS, employee well-being, and job involvement: an empirical study	HPWS:	Job involvement	Mediator: Employee well-being	Taiwan	Theory of planned behavior (Fishbein and Ajzen, 1975)	Positive relationship	productivity, innovation and customer satisfaction in order to provide further empirical verification of the "performance chain." Finally, future research might seek to further clarify the impact of each of the three HR dimensions upon each individual dimension of JS and OC.
									Future research can further emphasize an examination of how and why HPWS affects employee well-being. Future research can take into account different aspects of employee well-being to provide a more holistic view of employee well-being to add more understanding in terms of HPWS

22.	Mihail & Klotz (2016)	To examine the effects of high-performance work systems on hospital employees' work-related well-being: Evidence from Greece	HPWS: Recruitment & selection, Training & development, Participation in decision making, Employment security, Performance management, Job clarity and job autonomy	Hospital employees' work-related well-being	Greece	Social exchange theory	Positive relationship	and positive psychology's role in enhancing employee and firm performance. Future research can try to validate the results with a larger samples. Future research could examine the mediating role of social (and economic) exchange in the relationships between HPWS and employees' well-being, in a further effort to unlock the 'black box' in the relationship between HPWS and organizational performance
23.	Chang & Chen (2011)		employment security, selective staffing, comprehensive training, reduced status differentiation	Employee performance			Positive relationship	

24.	Zhang et al. (2013)		n, and competitive compensation & benefits	work- related well-being	Economic exchange and social exchange as moderator	China				HPWS may lead to work related wellbeing. The economic exchange perception increases the possibility that HPWS leads to employees' emotional exhaustion, while the social exchange
25.	Munjuri (2011)		Recruitment, training, compensation , employee participation and job Security							
26.	Mao, Song, & Han (2013)		Selected HRM practices	Employee performance					Significant relationship	
			Employee perspectives of high- performance work systems	Job satisfaction and affective Commitment		China				employee perspectives of high-performance work systems have a positive effect on both job satisfaction and affective commitment; and breadth of behavioral script and level of autonomy mediate the relationship, but skill variety

27.	Martinaityte (2014)		Selective hiring, training, performance appraisal, reward, employee participation & communication, job design, and playfulness at work	Employee creativity	Lithuania				<p>did not mediate the relationship.</p> <p>HPWS related to need satisfaction, but perceived HPWS did not mediate the relationship between branch HPWS and need satisfaction. Need satisfaction related to intrinsic motivation and creative process engagement and intrinsic motivation fully mediated the relationship between need satisfaction and creative process engagement. Need satisfaction fully mediated the relationship between perceived HPWS and creative process engagement but, only partially mediated the perceived HPWS-intrinsic</p>
-----	---------------------	--	--	---------------------	-----------	--	--	--	--

Appendix 4

Matrix of Some Dimensions of Job Performance

		Task Performance	Contextual Performance	Counterproductive Behavior	Others
1.	Avey & Mussto (1973)	i). Working accurately ii). Showing concern for time. iii). Detail and	i). Cooperating and extra time ii). Dealing with others in organization iii). Dealing with public iv). Showing responsibility and initiative		
2.	Jiambalvo (1979)	i). Understanding ii). Planning iii). Revising	i). Promoting ii). Providing training iii). Recognizing problems iv). Suggesting solutions v). Reviewing work vi). Cooperation vii). Respect viii). Special competence		
3.	Murphy, (1989)	Task behaviors	Interpersonal behaviors	Downtime behaviors Destructive/hazardous behaviors	
4.	Campbell, (1990)	Job-specific Proficiency	i). Written and oral communications. ii). Demonstrating effort iii). Maintaining personal discipline iv). Supervision and leadership v). Facilitating peer and team performance vi). Management and administration		

5.	Borwan & Motowidlo (1993)	Task performance	Contextual performance	Overall Performance	Work
6.	Viswesvaran (1993)	i). Productivity ii). Quality iii). Job knowledge	i). Communication competence ii). Effort iii). Leadership iv). Administrative competence v). Interpersonal competence vi). Compliance with and acceptance of Authority.		
7.	Hunt (1996)		i). Adherence to rule ii). Industriousness iii). Thoroughness iv). Schedule flexibility v). Attendance	i). Off-task behavior ii). Unruliness iii). Theft vi). Drug misuse	
8.	Allworth & Hasketh (1999)	Task performance	Contextual performance	Adaptive performance	
9.	Viswesvaran & Ones (2000)	Task performance	Organizational Citizenship Behavior	Counterproductive behavior	
10.	Michel (2000)	Task performance	i). Interpersonal performance ii). Civic performance		
11.	Pulakos et al. (2000)	Task performance	Contextual performance	Adaptive performance	
12.	Renn & Fedor (2001)	i). Work quantity ii). Work quality			
13.	Rotundo & Sacket (2002)	Task performance	Organizational Citizenship Behavior	Counterproductive productive	
14.	Bakker et al. (2004)	In-role performance	Extra-role performance	i). Absenteeism ii). Presenteeism	
15.	Burton et al. ()				Adaptability
16.	Griffin et al. (2007)	Task proficiency		i). Absenteeism ii). Presenteeism	
17.	Allen (2008)			i). Absenteeism ii). Presenteeism	
18.	Escorpizo (2008)		269	i). Absenteeism ii). Presenteeism	

19.	Fluegge (2008)	Task performance		Organizational Citizenship Behavior		Creative performance
		Task performance	Contextual performance	Contextual performance	Assignment-specific performance	
20.	Nafei (2015)					



UUM
Universiti Utara Malaysia

Appendix 5
Matrix of Some Selected Previous Studies on Physical Working Condition and Job Performance

S/N	Author/Year	Aim	IV	DV	Moderator/ Mediation	Context	Theory	Findings	Suggestions /future Research
1.	Akgunduz (2015)	To investigate the influence of self-esteem and role-stress on job performance in hotel businesses	Role stress: *Role ambiguity *Role conflict *Role overload	Job performance		Turkey	Role Theory	The result of the study indicated three patterns: role ambiguity and role conflict are negatively associated with job performance; role overload and self-esteem are positively associated with job performance and hospitality settings cross-nationally. Additionally, focusing on job performance, role stress, self-esteem and their relationship with leadership and organizational devotion in future	Future studies could replicate and extend this study using larger samples of employees in different tourism and hospitality settings, both in Turkey (e.g. airlines and travel agencies) and in other countries. In addition, future research should be directed towards examining the relationships in various tourism and hospitality settings cross-nationally. Additionally, focusing on job performance, role stress, self-esteem and their relationship with leadership and organizational devotion in future

2.	Suleiman and Al-Harethi (2013)	To examine the potential relationships between perceived work climate and work performance in security organizations	Work climate	Job performance	UAE	"two-factor" theory (Herzberg et al., 1959).	Positive relationship	studies would enable the testing of different hypotheses, Suleiman and Al-Harethi (2013) future studies may try using more objective measures such as supervisor-rating or results-based evaluation. The current study did not examine the variables that shape and/or determine work climate. Future research may also try to study the antecedents of climate as well as its consequences, i.e. conceptualizing work climate as a mediating variable rather than independent variable.
3.	Jayaweera (2015)	To tested the relationship between work environment	Environmental factors: *Physical work environment	Job performance	England	two-factor" theory (Herzberg et al., 1959).	Positive relationship	Future studies examine the relationship between work condition and job

	I factors and job performance with work motivation	*psychosocial environment						performance across different job titles.
4. Edirisooriya (2014)	To illustrate to what extent does employee rewards have an impact on employee performance in a public sector organization in Sri Lanka.	Extrinsic and intrinsic reward	Job performance		Sri Lanka		Positive relationship	Future researches to include more variables such as flexibility, work-life balance, autonomy, work supervision, work environment and profit sharing which are not analyzed in this current study. Furthermore, a more comprehensive study can be extended by comparing private sector organization with public sector organization to ensure that better generalize findings can be achieved.
5. Kim (2014)	To investigate the effect of work-life balance on affective	Work-life balance	In-role performance	Mediator: Affective commitment	Korea	Social exchange Theory	Negative relationship	Future research should include other outcome variables such as job satisfaction, employees'

[illegible]

commitment, and productivity. Furthermore, personal outcomes such as those related to one's family issues should be considered as the outcomes of work-life balance.

Appendix 6

Matrix of Some Selected Previous Studies on HRM practices and Job Performance

Sl/N	Author (s) Year	Independent variable	Dependent variable	Moderating variable	Finding	Context	Country/Place
02	Kepha, et al. (2014)	Recruitment & Selection	& Employee Performance	None	Positive relationship	Public Sector	Kenya
03	Kepha (2014)	HRM practices	Employee Performance	Knowledge management effectiveness	Positive Relationship	Public Sector Research institutes Kenya	Kenya
04	Khan (2012)	Training Motivation	& Employee Performance	None	Positive impact	Public Sector	Pakistan
05	Jagero (2012)	On the job training	& Employee Performance	None	Positive influence	Public Sector	USA
06	Alsabbah & Ibrahim (2014)	HRM Practices	& Employee Performance	None	Positive relationship	Public Sector	Malaysia
07	Shaukat,et al (2015)	HRM Practices	Employee Performance	None	Positive relationship	Public Sector	Pakistan
08	Samuel and Esther (2013)	Compensation	Employee Performance	None	Moderately positive	Public Sector	Kenya
09	Agarwala et al. (2014)	Work life-conflict	Employee commitment	Managerial support	Positive relationship	Public Sector	India, Peru, and Spain
10	Abdul hamed et al., (2014)	Compensation	Employee performance	None	No significant effect	Private Sector	Pakistan
11	Rizal et al., (2014)	Compensation Training	Employee performance	Organizational commitment & motivation (mediator)	No direct effect on employee performance	Public Sector	
12	Hafeez (2015)		Employee performance	None	Positive relationship	Private Sector Pharmaceutical Industry in Karachi	Pakistan

12	Marwat (2011)	Training Compensation	Employee performance	None	Positive relationship	Private Sector Telecom Industry	Pakistan
13	Munjuri (2011)	Training, performance related pay	Employee performance	None	Positive relationship	Public Sector Institutes of higher learning	Kenya
14	Tabiu & Nara (2012)	Recruitment and selection	Employee performance	None	Positive relationship	Public Sector Institutes of higher learning	Nigeria
15	Saleem & Khurshid (2014)	Recruitment and selection	Employee performance	None	Positive relationship	Private Sector Banking Industry	Pakistan
16	Poursafar, et al (2014)	Performance appraisal	Task performance	Organizational commitment & organizational support (mediator)	No direct relationship	Gas company in Gilan	Iran
17	Poursafar, et al (2014)	Performance appraisal	Contextual performance	Organizational commitment & organizational support (mediator)	No direct relationship	Gas company in Gilan	Iran
18	Aroosiya and Ali (2014)	Job design	Employee performance	None	Positive nexus	Public Sector School Teachers in the Kalmunai zone	Sri Lanka
19	Prieto-Pastor & Martin-Perez (2015)	HRM Practice	Ambidextrous learning	Management Support	Positive nexus	Public Sector	Spain
20	Karatep and Kilic (2015)	Work-Family conflict	Emotional, Exhaustions turn over intention	Management Support	Positive nexus	Private Sector	Turkish Republic of Northern Cyprus
21	Sawang (2010)	Job Satisfaction	Psychological strain	Management support (mediator & moderator)	Positive nexus	Private Sector	Thailand

23	Yunus et al., (2013)	Green IT Adoption	Environmental Sustainability	Top management enforcement	Positive relationship	Public Sector	Malaysia
24	Khalid et al, (2015)	Job Stress	Job improvement financial	Supportive Leadership	Positive relationship	Public Sector Education Institution	Pakistan
25	Vermeeren (2014)	HRM Practices	Outcomes & organizational outcomes	Job Satisfaction (mediator) None	Negative effect on job stress	Public Sector Health care organization	Netherlands
26	MPhil, et al (2014)	HRM(T & D) Practices	Employees Performance		Positive nexus	Private Sector Banking Sector	Pakistan
27	Mohammed & Abdul Hameed (2015)	HRM Practices	Employ work related attitude	None	Positive relationship	Public Sector Health Institution	Tricity
28	Hameed & Waheed (2011)	Employee Development	Employee Performance		Positive relation	Public Sector Information Technology	Pakistan
29	Ko et al (2013)	Work Practices & Job Satisfaction	Organizational Performance	Management support	Positive nexus	Private Sector	USA
30	Mihalache (2012)	Offshoring	Firm, innovation, (R&D and Engineering)	Management team Attribute	Positive relationship	Private Sector	Netherlands
31	Finkelstein & Hambrick (2013)	Top management Team	Organization outcome	Managerial Discretion None	Mixed Nexus	Private Sector	Belgium
32	Mohammed & Hameed 2014	HRM	Employee work related attitude		Positive nexus	Private Sector	Pakistan
33	Zahoor, et al, (2015)	HRM practices	Employee & Performance	None	Positive relation	Telecom Sector	Pakistan

33	Sophia & Anastasun (2014)	Recruitment communication	Job advert	None	Positive relation	Private Sector	Greece
34	Hameed et al (2014)	Compensation	Employee performance	None	Positive relationship	Banking Sector	Pakistan
35	Pohler (2010)	Union and Employee	Organization outcome	Management Response	Positive relationship	Public Sector Education Institution	Alberta Canada
36	Sheik et al. (2014)	training and development, performance related pay, team- work, job design, and autonomy	employee, organizational and financial outcomes in	Employee satisfaction (mediator)	Positive nexus	Public and Private Sector	Bahawal pur
37	Erabas et al. (2014)	Performance appraisal influence	Employee performance	None	Positive Relationship	Private Sector Industrial cooling management	Turkey
38	Tabiu & Nura (2013)	HRM Practices	Employee Job Performance	None	Mixed Findings	Public Sector Institution of higher learning	Nigerian
39 40	Kehoe & Wright (2013)	HP, HR practices	Employee's Attitudes & Behavior	Affective organizational commitment (mediator)	Positive nexus	Public Sector	
41	Amin et al. (2013)	Training Development	& Employee Performance	None	Positive relationship	Public Sector Isfahan regional electric company	Nil
42	Schuler & Jackson (2012)	HRM Practices	Organization effectiveness	None	Mixed Findings	Private Sector	Lancaster UK
43	Marwat (2010)	HRM	Employee performance	None	Positive Relationship		

43	Samnani & Singh (2013)	Zero-sum performance enhancing compensation systems	Employee productivity	Workplace bullying, stress & individual competition (mediators)	Positive nexus	
44	Wolter (2014)	HR practices	Employee performance	None	Positive Relationship	
45	Falola et al., (2014)	Training Development	& Employee Performance		Strong relationship	
46	Samnani & Singh (2013)	Zero-sum performance enhancing compensation systems	Employee productivity	Workplace bullying, stress & individual competition (mediators)	Positive nexus	
47	Alfes et al. (2013)	Perceived HR practices & perceived line manager behavior	& Employee Task Performance	Employee engagement (as mediator)	Positive relationship	
48	Muduli (2015)	selective staffing, extensive training, internal mobility, job security, clear job description, result-oriented appraisal, incentive reward, participation,	Organizational performance	HRD Climate (mediator)	Positive nexus	

49		teamwork and flexibility	employee, organizational and financial outcomes in	Employee satisfaction (mediator)			
	Vermeeeren et al. (2014)	training and development, performance related pay, team- work, job design, and autonomy		None	Positive nexus		
50	Mohamed & Abdul Hameed (2014)	HRM	employee work-related attitudes	Work attitudes	Positive nexus		
51	Koa & Smith-Waltera (2013)	HRM	Organizational performance	Competitive strategies	Positive nexus		
52	Waiganjo, Mukulu, & Kahiri (2012)	SHRM	Firm	None	Mixed nexus		
53	Savaneviciute & Stankeviciute, (2012)	HRM practices	Employee Performance	None	Positive nexus		
54	Avanesh (2011)	Succession planning	Firm performance	Employee satisfaction (mediator)	Positive nexus		
55	Vermeeeren et al. (2014)	training and development	employee, organizational	Employee engagement (as mediator)	Positive relationship		
56	Alfes et al. (2013)	Perceived HR practices & perceived line manager behavior	& Employee Task Performance				
57	Muduli (2015)	selective staffing, extensive training,	Organizational performance	HRD Climate (mediator)	Positive nexus		

		internal mobility, job security, clear job description, result-oriented appraisal, incentive reward, participation, teamwork and flexibility						
58	Mozael (2015)	Training design, delivery style & on-the-job and off-the job training	Employee performance	Training and Development (mediator)	Nexus			
59	Elnaga, Imran & Imran (2013)	Training	Employee & Performance	Allocentrism/Idiocentrism Self-Efficacy,	Positive nexus			
60	Lam et al., (2012)	Employee involvement	Employee performance	Non	Positive relationship			
61	Singh et al.,	Performance appraisal	Employee performance		Positive relationship			
62	Owoyemi & George (2013)	Performance appraisal	Employee performance	None	Significant correlation			
63	Mir & Ahmed (2014)	Performance appraisal	Employee performance	None	Positive relationship			
64	Oluigbo and Anyiam (2014)	Compensation	Employee Performance	None	Positive influence			

APPENDIX 7: Letter for Data Collectio



OTHMAN YEOP ABDULLAH GRADUATE SCHOOL OF BUSINESS
Universiti Utara Malaysia
TAMBUK
06010 ABU ABDULLAH



Tel: 03-65 61 21 01/03-65 61 21 30
Fax: 03-65 61 21 31/03-65 61 21 32
Email: y.ahmad@uum.edu.my

UUM/OYAGSB/R-4/4/1
18 September 2013

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF RECOMMENDATION FOR DATA COLLECTION AND RESEARCH WORK

This is to certify that Umar Abdullah Abbah (Matric No: 900614) is a student of Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia, pursuing his Doctor of Philosophy (Ph.D). He is conducting a research entitled "Moderating Effect of Working Condition on the Relationship Between High Performance Work System and Job Performance in Nigerian Polytechnics" under the supervision of Assoc. Prof. Dr. Abdul Halim B. Abdul Majid.

In this regard, we hope that you could kindly provide assistance and cooperation for him to successfully complete his research. All the information gathered will be strictly used for academic purposes only.

Your cooperation and assistance is very much appreciated.

Thank you.

"BERKHIDMAT UNTUK NEGARA"
"KEDAH AMAN MAKMUR - HARAPAN BERSAMA MAKMURKAN KEDAH"
"ILMU, BUDI BAKTI"

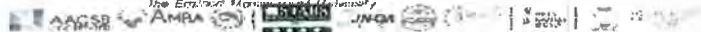
Yours faithfully,

ROZITA BINTI RAMLI
Reg. No.

Ast. Unit
for
Othman Yeop Abdullah Graduate School of Business

c.c. Supervisor
Student's File (900614)

Universiti Pengurusan terkemuka
The Premier Management University



Appendix 8

Recommendation for Data Collection

UMARU ALI SHINKAFI POLYTECHNIC SOKOTO
P.M.B 2356, SOKOTO STATE -NIGERIA

Professor Umaru A. Ibrahim, G.C.
Vice-Chancellor
Umaru Ali Shinkafi Polytechnic, Sokoto
Sokoto State, Nigeria

Mr Mustapha Sada Alhambakar
Deputy Registrar



Central Administration
Umaru Ali Shinkafi Polytechnic
Telephone: 090-2356 300000/300001
Telegram: 900000/300001
E-mail: info@polytechnic.edu.ng
www.polytechnic.edu.ng

REF: UASP/REGEN/750/UX

Date: 1st November, 2018

Umar Abdullahi Abba,
Researcher/Principal Investigator,
Universiti Utara Malaysia


Sir,

**RE: DATA COLLECTION AND RESEARCH WORK – REQUEST FOR
TOTAL NUMBER (POPULATION) OF ACADEMIC STAFF**

Your letter dated 14th October, 2018 on the above subject matter, I am directed to inform you that as at 1st November, 2018 the population of academic staff of this institution is 817.

Wishing you success in your research.

Thank you.


Mustapha Alhambakar Shagari
Deputy Registrar (Establishments)
for Registrar



WAZIRI UMARU FEDERAL POLYTECHNIC

PM B 1034, BIRNIN KEBBI, KEBBI STATE
TEL: 08120101077, 08039603680, 08066131905
web site: www.wufpbkes.org E-mail: info@wufpbkes.org

RECTOR: **Ans. Muhammad Sani Aliyu**

B.Sc (Hons), M.Sc (Arch), M. Ed., M.A. MAM
BSc (Hons) Architecture, FIDA
member of the staff

REGISTRAR **Usman Umar Kanti**

B.Ed, M. Ed POLY (1-10-1)
info@wufpbkes.org

Ref: WUFPBK/REG/07/Vol 1

Date: 31st October 2018

Umar Abdullahi Abboh,
Research/Principal Investigator
Universiti Utara, Malaysia

**RE: DATA COLLECTION AND RESEARCH WORK – REQUEST FOR
TOTAL NUMBER (POPULATION) OF ACADEMIC STAFF**

Your letter on the above subject dated 9th August, 2018 refers

I am directed to write and inform you that the total number (population) of Academic Staff in the Polytechnic is five hundred and three (503) as at 31st October, 2018.

While hoping that you will find the information useful, I wish you success in your studies.

Thank you.

Aliku Muhammad Bello
Deputy Registrar (Establishment)
For Registrar



ABDU GUSAU POLYTECHNIC

ABDU GUSAU POLYTECHNIC
Jalan Tenggat, 43100, Teluk Anson, 43100, Teluk Anson

Abdullah Umar 311001, Teluk Anson
Email: abdu.gusau@uam.edu.my

Abdullah Umar 311001, Teluk Anson
Email: abdu.gusau@uam.edu.my

AGP/TM/REG/007

Date: 31st October 2018

Umar Abdullahi Abbob
Research/ Principal Investor
University Utara Malaysia

BELDADA COLLECTION AND RESEARCH WORK – REQUEST FOR TOTAL NUMBER (POPULATION OF ACADEMIC STAFF)

Your letter on the above subject matter dated 31/10/2018 refers.

I am directed to write and inform you that, the total number (population
of academic staff in the polytechnic is one Hundred and Forty Four (144)
as at 1st November 2018

With the hope this information will be useful in your programme of
studies


KABIRU MUSA,
Establishment Secretary
For **REGISTRAR**